1991

Women's adjustment to nontraditional careers: psychological consequences of occupational integration

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Order Number 9202338

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Iowa State University, 1991

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Women's adjustment to nontraditional careers: Psychological consequences of occupational integration

by

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A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

Major: Psychology

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

For the Major Department

Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa

1991

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ABSTRACT

The movement of women into the labor force has sparked a wide variety of research topics, but the movement of women into traditionally male-dominated careers has not been thoroughly investigated. While most research in this area has tended to focus upon females' occupational interest, there exists a need to address the adjustment of women to these nontraditional careers after they have obtained the position. The primary purpose of this study was to identify a number of life experiences and personal characteristics that are related to women's adjustment and perceived success in nontraditional careers. The sample consisted of 134 women from traditional and nontraditional occupations in an academic setting. These women completed the Career Adjustment and Success Questionnaire (developed by the author) which contained scales assessing such life experiences as socioeconomic status, past social support, current social support, level of independence, as well as the personal characteristic of sex role orientation. The Bem Sex Role Inventory (Bem, 1981) was also used as a measure of sex role orientation. A wide variety of demographic information was gathered and potential moderators were identified from these data (e.g., marital status, age cohort, and number of children in the home). The survey constructed for this research was found to be both reliable and discriminating.

Specific predictors were discovered to account for 21 percent of the variance in adjustment and 21 percent of the variance in success (when adjustment was included as a predictor). Social support (Current Social Support and Spouse Support) and sex role orientation (Femininity and Androgyny) were found to be particularly influential. The results of a series of discriminant analyses supported the discriminating properties of the predictor variables for purposes of classifying traditional and nontraditional career women by their levels of adjustment, perceived success, and the traditionality of their careers. This study identified a means of predicting how well certain women may adjust and at what level they may succeed in nontraditional careers. The findings suggest and support the utility of using life history information, current experiences, and sex role orientation to predict the adjustment and success of women in traditional and nontraditional careers.

INTRODUCTION

In the last two decades we have witnessed an increasing number of women entering nontraditional (i.e., male-dominated) occupations. There has, consequently, been an attempt to investigate this behavior. Most studies have focused on the "type" of women who choose nontraditional careers; their personalities, life-experiences, education, and level of intelligence. Much of the existing data on women who choose nontraditional careers have been gathered from samples of college students. Those studies using samples of women actually employed in nontraditional jobs typically compared these women with those holding traditional jobs. Again, the focus of these studies was to identify characteristics common to "nontraditionals" that are divergent from women in traditional occupations (Greenfeld, Greiner, & Wood, 1980; Lemkau, 1979; Standley & Soule, 1974). It has been found that one's socialization, family make-up, and sex-role orientation play a part in the decision to pursue a nontraditional career (Auster & Auster, 1981; Galejs & King, 1983; Lemkau, 1979; O'Connell, Betz, & Kurth, 1989; Strange & Rea, 1983). While these studies have yielded valuable information regarding the type of woman who will seek out a nontraditional career, very few studies have examined the adjustment of these women to their nontraditional careers. Just as it is important to

determine the "type" of women choosing nontraditional careers, it is equally, if not more important to investigate how these women fare once they attain their goal of breaking into a male-dominated field.

Definitions of the Term Nontraditional

Hayes (1986) investigated how researchers have operationalized gender-concentrated occupations and educational settings and found quite a variety of terms used to describe the proportion of men to women. Terms such as "asextypical occupations", "sex-linked occupations", "gender-dominant", and "gender-traditional" have all been used in studies to refer to occupations normally held by a majority of males or a majority of females. He also found that the ratios chosen to designate an occupation as "nontraditional" varied almost as widely. For example, Marini and Greenberger (1978) believed an occupation comprised of less than 50% women can be classified as "nontraditional", while Wolkon's (1972) composition of less than 25% women is one of the more conservative definitions of "nontraditional". Burlin (1976) classified occupations as "innovative" if they were comprised of fewer than 30% females, as "moderate" with 30%-50% female composition, and as "traditional" if populated by over 50% females. Kluth and Muchinsky (1984) treated gender

concentration as a continuous variable using a four-level composition: 10% females/90% males labeled as "token condition", 30% females/70% males labeled as "minority condition", 50% females/50% males labeled as "equal condition", and 70% females/30% males labeled as "dominant condition". By far, the most conservative classification of occupational gender concetration is used by O'Bryant, Durrett, and Pennebaker (1978) to address the composition of occupations for both men and women. They used the figure of less than 5% of one sex to define an atypical or nontraditional occupation.

Background Factors Associated with Women in Nontraditional Careers

A variety of studies have attempted to determine which life experiences predict a woman's choice to pursue a nontraditional career. According to Muchinsky (in press), "for both genders, academic achievement, academic interest, socioeconomic status, and parental control versus freedom appear to be the dominant life history factors affecting vocational interests" (p. 18). Factors seen as critical in predicting females' vocational interest are position in family, academic achievement, warmth of maternal relationships, religious activity, and social leadership and popularity. Muchinsky stated that "females who were

first-born, were good students in high school, did not get along with their mothers, were not religiously active, and were not social leaders tend to pursue vocations which are non-traditional for women" (p. 19). Throughout the literature it appeared that the vocational interests of females were influenced more by their relationships to other people than were the vocational interests of males. "Women are more likely to pursue nontraditional vocations if they experienced less positive social relationships in adolescence, while more positive social relationships are associated with interest in vocations traditional for women" (Muchinsky, in press, p. 20-21).

While women have increased their participation in the workforce, the majority of women have continued to pursue traditionally female occupations. More recently, however, women have begun the gradual migration into male-dominated occupations. In response to this movement, many researchers have examined the differences between women who enter traditional and nontraditional occupations. After reviewing the literature, Auster and Auster (1981) concluded that women who enter nontraditional careers will more likely than not emerge from an environment in which: (1) the mother works, probably in a high-level, nontraditional occupation; (2) the father is an achievement role model and source of occupational identification; (3) both parents are supportive of their daughter's career orientation; (4) family SES is high; (5)

family size is small and she is firstborn or an "earlyborn" among female siblings; and (6) her peer group serves as a supportive influence.

Burlin (1976) found that a girl is more likely to aspire to an occupation in which 50% or fewer of the workers are women if her mother is currently employed in this occupational category. This finding is said to lend support to the importance of mothers as role models in the development of their daughters' career goals. Burlin (1976) also reported that the education level of one's father was positively related to interest in a nontraditional (or "innovative") career. Peng and Jaffe (1979) found that women in male dominated fields have higher academic ability and more course work in science and mathematics in high school, and they are more work-oriented than women in traditional fields. Zuckerman (1981) reported the following findings: mothers' educational levels predicted daughters' educational goals, while fathers' educational levels predicted sons' educational goals; Protestant upbringing predicted lower educational goals for the female sample; the mothers' career/homemaking roles were important models for their daughters; and mothers' nontraditional careers correlated with daughters' nontraditional career goals.

Research on females in nontraditional occupations has investigated the origins of needs and values. Parental values

are often emphasized as contributing to adult needs and values. Women who have chosen professional careers that are typically male-dominated reported parental values emphasizing achievement generally, and education specifically (Lemkau, 1979). Sixty-six percent of Standley and Soule's (1974) professional women felt their parents had emphasized achievement over social values as they were growing up.

In his recent review of the influences of life history experiences on vocational interests and choices, Muchinsky (in press) concluded that one of the most consistent factors affecting one's vocational behavior is relationship with one's parents. He states that "most studies of females entering male-dominated occupations point to the importance of parental influence" (p. 8). The relationship between parents and daughter can take the form of emotional ("psychosocial") support or a more economic ("status/income") means of support. Hannah and Kahn (1989) found that high school girls from families with high socioeconomic status (SES) were more likely than low SES girls to choose male-dominated occupations. They also reported that students, in general, varied their self-efficacy expectations according to the prestige level of the occupation, but low SES students held lower self-efficacy expectations than high SES students regardless of the job prestige level. Betz and Fitzgerald (1987) proposed that parental education may actually be more useful than SES in predicting female vocational interest and choices.

In their study using life history experiences to predict occupational success, Childs and Klimoski (1986) began by determining that success was composed of three composites: job success, personal success, and career success. By factor analyzing 72 items from a biographical inventory, Childs and Klimoski (1986) found five biodata factors: Social Orientation, Economic Stability, Work Ethic Orientation, Educational Achievement, and Interpersonal Confidence. With the application of regression analyses, it was found that Social Orientation and Interpersonal Confidence, accounting for significant unique variance in all three of the criteria, can be viewed as "Overall Success" antecedents. Success in education was found to be predictive of success in one's job and career. Educational Success was not, however, predictive of one's satisfaction with his or her job (titled "Personal Success"). Work Ethic Orientation was found to predict Career Success but not Job Success. Finally, the Economic Stability factor was only significantly uniquely associated with Career Success. This last finding was interpreted as follows: "early financial independence may help one survive the earlier, more unstable, years of one's career, contributing to the attainment of career sucess" (Childs & Klimoski, 1986, p. 7). In conclusion, these researchers discovered that the biodata inventory can be used in such a way as to predict and help explain occupational success.

In addition to the differences in family background and environmental characteristics that most researchers report regarding women in nontraditional occupations, several researchers have examined personal variables. For example, women in male-dominated occupations have been found to be high on competency traits as well as having background characteristics that foster achievement (e.g., high parental education and firstborn status; Lemkau, 1979). Moreover, nontraditional women view themselves as more autonomous and self-confident than traditional women (Winters & Sorensen, 1975).

Greenfeld et al. (1980) compared women in male-dominated jobs, female-dominated jobs, and those in sex-ratio balanced jobs. They found that women holding male-dominated jobs tended to rate success as more important to their feelings of well-being than did women in the other job categories. Moreover, women in male-dominated jobs were more likely to be childless, older, better educated, and have fathers with higher educational attainment than the other women. Women in female-dominated jobs, however, rated the importance of their work higher than did women in male-dominated jobs. Greenfeld et al. (1980) found that while both groups in their study were concerned about the people they work with and with being well-liked, women in male-dominated jobs valued instrumental success more than did women in female-dominated jobs. (Instrumental success included the attainment of authority,

higher salaries, more recognition, and job titles of responsibility.)

Muchinsky (in press) discussed a life experience that is not typically included in the well-known biodata questionnaires. The presence of a mentor or role model may be highly influential in one's vocational choice. This role model would be present during adolescence and high school years, but mentoring and role modeling is also influential in the workplace. He stated that "it could be potentially of great value to include such items in a biographical questionnaire" (p. 25).

Nelson and Quick (1985) emphasized the importance of same-sex mentoring relationships to increase professional women's chances for advancement and as a means of support or preventative stress management. They recommended that organizations establish reward systems to encourage mentors to support women and that training programs emphasize mentoring and positive role-modeling.

Social comparison, the process of comparing one's self with others, occurs in most realms of daily life, including the workplace. An individual observes others in similar jobs and determines how satisfied these "others" are. The individual then compares herself to these other people and constructs some measurement of her satisfaction based on how the others feel about their jobs (Salancik & Pfeffer, 1977).

When considering the utility of this process as an explanation of women's satisfaction with their nontraditional occupations, the issue of who comprises the comparison other must be addressed. As girls grow into women, they have the opportunity to develop a sense of who comprises their comparison others. Experiences such as those encountered in school settings expose children to a variety of opportunities to define their identities. In later life, if women in nontraditional occupations differ from their male counterparts, then these men are not the most appropriate comparison others for these women. In this case, the use of an inappropriate other may have a variety of consequences. If the other is satisfied with his job, the woman may "determine" her situation to be satisfying. This comparison may have detrimental consequences if external facets of the woman's job are less than satisfactory, yet she does not attempt to rectify the situation due to her inappropriate comparison and construction of satisfaction. Another detrimental outcome of the use of an inappropriate comparison other could arise if the female employee derives her feelings of dissatisfaction based upon a worker who has different needs (which are not being met) and is dissatisfied. The female worker may actually hold a position in which <u>her</u> needs and values are being met, but she assumes she should be dissatisfied because a male co-worker is dissatisfied. This dissatisfaction may lead to withdrawal behavior on the part of the nontraditional

female. Although individual differences in needs and values are inherent in this theory, the existence of female role models may provide the woman in a nontraditional occupation with a more appropriate comparison other upon which to base the extent of her job satisfaction. This aspect of the Interpersonal Comparison Processes theory gives merit to the importance of female role models in nontraditional fields, as well as to the idea of same-sex peer support and same-sex mentoring relationships (Darley, 1976; Nelson & Quick, 1985; Ragins, 1989; Morrison & Von Glinow, 1990).

Sex Roles and Women in Nontraditional Careers

The traditional sex role characteristics of women (emotional, nurturing, compliant) are often viewed as conflicting with the personality characteristics demanded in a male-dominated career (emotional stability, self-reliance, aggressiveness; Schein, 1973). In fact, a large body of research has shown that masculinity (or instrumentality) is a critical factor in women's selection of nontraditional occupations (Harren, Kass, Tinsley, & Moreland, 1979; Strange & Rea, 1983, Sztaba & Colwill, 1988; Trigg & Perlman, 1976; Yanico & Hardin, 1981).

O'Connell, Betz, and Kurth (1989) attempted to determine if women currently training for nontraditional (engineering

and veterinary medicine) occupations were "(a) a continuation of the vanguard [pioneers], rejecting traditional constraints on females; (b) a transitional group similar in some ways to the pioneers and in other ways similar to women in traditional occupations; or (c) similar to women pursuing traditionally female [nursing] occupations" (p. 43). They concluded that, "in short, women pursuing nontraditional fields appear a transitional group--for the most part committed to full-time work but uncertain about what to do when preschool-aged children are present" (p. 44). Their data suggested that women in both types of fields begin their careers with a desire to "have it all-career and family". The women in nontraditional fields were slightly more liberal in regard to their gender role beliefs and their plans for work involvement (full-time vs. part-time; O'Connell et al., 1989).

Lemkau (1979) found that "except for a tendency to be more oriented toward ideas and things and less to the social environment, the nontraditional career-woman does not differ from the more typical woman on positive aspects of the feminine stereotype" (p. 237). She continues: "A slightly different though complementary point of view suggests that women choosing traditional and nontraditional careers differ not so much in terms of their achievement needs as in the comfort with which they can express them in 'male' occupational roles. Choice of a 'feminine' occupation may represent a compromise, allowing the expression of achievement

strivings with less conflict with cultural sex role demands. Traditional career choice can be seen as reducing internally generated conflict and minimizing externally imposed negative feedback" (Lemkau, 1979; p. 238).

Sex-role orientation is an important variable to consider when examining women's occupational behavior. The existence of sex-role stereotypes, or the belief that men and women differ in many ways, has been convincingly documented. The degree to which these widely held beliefs represent reality, however, remains controversial (Spence, Helmreich & Stapp, 1975). Established paradigms contend that sex differences are natural; that anatomy determines one's destiny. These theories of development and behavior are both descriptive and prescriptive. But during the past few decades, sex-role research has been rapidly emphasizing the need to develop human potential rather than characteristics and roles that have traditionally been sex-specific (Rowland, 1980). In general, one's sex-role has been found to be related to the selection of a field of study or an occupation. However, previously restricted and rigid sex-role norms have begun to dissipate somewhat in the past decade, and increasing numbers of males and females have begun entering nontraditional fields (Strange & Rea, 1983).

According to societal norms, a woman who displays achievement-oriented ("male") characteristics such as

aggressiveness, rationality, and independence in her career is considered to be fulfilling a socially inappropriate sex-role and will probably experience some anxiety and possible some real social sanctions as well (Darley, 1976). Because there are no clearly defined norms for a combination of roles such as mother, wife and executive, Darley believes women attempting such a combination will experience many "strains and insecurities". Schaubroeck, Cotton, and Jennings (1989) list tension, job dissatisfaction, and withdrawal behavior such as absenteeism, turnover intentions and actual turnover, as correlates of role conflict and role ambiguity (called role stressors). Hall and Gordon (1973) found the incidence of conflict and pressure to relate negatively to happiness and satisfaction in their sample of married women--but only for the full-time workers.

Women are more likely than men to be socialized into expressive roles which emphasize emotional nurturance and support (Hirsch & Rapkin, 1986). These roles are in contrast to the instrumental, assertive roles valued in traditionally male professions (e.g., management). From a young age, traditionally socialized females are taught that their destiny is to be a wife and mother, and that these roles should take precedence over occupational roles. Expectations thus become channeled into jobs which are conducive to domestic roles (e.g., part-time work)--typically middle-status, low paying, traditionally female occupations. The belief that being

responsive, helpful and supportive will lead to marriage may predispose these women to people-oriented, "female" occupations. In contrast, Herzog and Bachman (1982) found that sex-role attitudes had little bearing on the status and prestige that a woman aspires to in her work. Sex-role attitudes were only critical in the decision to enter the work force and in the importance placed upon labor force participation. Sex-role stereotypes have been shown to survive in the minds of male managers (Brenner, Tomkiewicz, & Schein, 1989). While female middle managers no longer sex-type managerial jobs, male middle managers continue to believe that men have more of the requisite characteristics to be a successful manager than do women. These beliefs may result in discrimination against female applicants and employees by male managers and/or male colleagues. These beliefs may also be transmitted to the children (both male and female) of these male managers, and subsequently perpetuated.

While holding age and education constant, Greenfeld et al. (1980) found that "women in male-dominated jobs have more sex discrimination problems and pressures from others on the job while women in female-dominated jobs feel their work is more important and feel more satisfaction with their accomplishments at work even though women in male-dominated jobs have received a greater number of promotions" (p. 303). In other words, women in nontraditional jobs may have achieved

more, but they are not more satisfied because of it, and may be prone to more dissatisfaction in certain aspects of the job.

When discussing the job satisfaction of women in nontraditional careers in the context of sex role orientation, an intrapersonal process may be considered rather than the interpersonal comparison process previously discussed. According to this theory, one person may define a particular job as highly satisfying, while another person may find the same job very dissatisfying. The individual may determine her ideal job on the basis of her needs and values. An ideal job would fulfill both physical and psychological needs (e.g., money for food and clothing, and recognition for achievement, respectively).

When considering the utility of this theory for describing the origins of the job satisfaction of women in nontraditional careers, we must focus on the possibility of gender and individual differences in needs and values. It is possible that women may have different expectations (from men) as to what may occur on the job (Weaver, 1978; Mottaz, 1986). Murray and Atkinson (1981) investigated and found support for the basic argument that although women often receive fewer extrinsic rewards (e.g., money, promotions) from their jobs than men, they have lower expectations and therefore perceive themselves as being just as satisfied as men. Locke (1969) argued that an emotional response of satisfaction is not

necessarily a function of the degree of difference in the expected and actual outcomes of the job, but is a function of the discrepancy between what is desired and what is received. It is also possible that differences may exist between women's occupational needs and values (desires) and those of male counterparts. While there is some support for these differences, Beutell and Brenner (1986) suggested that the trend is toward similarity rather than dissimilarity. For example, Chusmir (1985) found that working women have a need for power that is comparable (or stronger) in magnitude to men.

As Davidson and Cooper (1986) reported, "With more women entering management, it is incumbent on organizations to develop corporate policies that will minimize the stresses and strains which this study has found to be particularly pertinent to female managers" (p.322-323); specifically, the perceived disadvantage regarding promotions and career development due to sex, feelings of being undervalued, and pressures to perform better at their jobs compared to male colleagues.

It is now recognized that job satisfaction may have a significant affect on the physical and psychological well-being of the individual, which in turn may have consequences for work organizations. Therefore, in view of the increasing participation of women in the work force, and the "present

concern for women's rights, knowledge of gender differences in work attitudes would seem to be of considerable practical importance to employers when designing programs to maximize worker satisfaction" (Mottaz, 1986; p. 361). Schaubroeck et al. (1989) suggested the increase of participation and co-worker social support as means of preventing the detrimental effects of role stressors.

The Outcomes of Occupational Integration

When a woman enters a career in a traditionally male-dominated field, a variety of interpersonal and intrapersonal phenomena occur. She is met with a myriad of reactions from superiors, co-workers, subordinates, friends, family, and society. Her response to these reactions is dependent upon her life experiences, her personality characteristics, her self-concept, and the level of support she receives from those who are important to her. The combination of these various factors determine the level of adjustment and perceived success she will experience in this nontraditional career.

Adjustment was defined for the purposes of this study as the level of physical and mental comfort at which women in nontraditional careers are functioning. While there exist a wide variety of sources leading to discomfort, certain factors the woman brings to the situation determine what impact the potential sources of discomfort will have upon her. Specific

life experiences and personality characteristics may increase a woman's ability to change the situation or adapt to the environment.

Success is an evaluative concept that can be defined in a variety of ways. Because this "evaluation requires judges and a criterion against which an outcome can be assessed... research concerned with success must...consider to whom and by what criteria a given indicator connotes success" (Jaskolka, Beyer, & Trice, 1985). For purposes of the present study, success was judged by the incumbent. When individuals judge their own success, they can use internalized aspirations and goals that are not available to observers for use as criteria. It is these expectations, goals, and perceptions that are important for this stage of research. More objective, "hard" indicators of success such as salary and status level can confound success with age and tenure and do not provide an wholely accurate measure of the many facets of success. Therefore, success of women in nontraditional careers was defined as perceived level of effectiveness and performance.

Women pursuing nontraditional careers encounter a variety of stress-producing circumstances. Although the term "stress" has become a common part of our vocabulary, there are still many definitions of stress, with few people agreeing upon one definition of the concept. Sells (1970) believes stress

arises when an individual must respond to a situation for which she has no adequate response and the consequences of failure to respond effectively are important. Occupational stress falls within this general definition of stress, where negative environmental factors or stressors are associated with a particular occupation (Cooper & Crump, 1978). Cooper and Crump (1978) reported that "inherent in the concept of occupational stress is the interaction of the person with his environment, giving rise to coping or maladaptive behavior, and ultimately, to stress-related disease" (p. 420). The stress that women in nontraditional careers experience was referred to as occupational stress and conflict for the puposes of this study. Although Selye (1956, 1983) also emphasized the positive aspects of stress (in the form of optimal arousal), for this study's purpose the focus was on stress as a negative state of arousal which may lead to lower levels of adjustment. The situation must be perceived as presenting a demand which exceeds the individual's resources for an effective coping respons, for that situation to be considered a stress on the individual.

Some sources of stress are intrinsic to the job. The employee can do little to change these conditions, therefore this subsequent feeling of lack of control can lead to stress and stress-related problems (Smith, 1985). Many stressors are physical aspects of the working conditions, such as heat and noise; others, such as overload, underload, and shiftwork, are

found in the design of the job; while still others, such as the employee's role in the organization, career development, and the organizational structure and climate, are contingent upon the employee's superiors, norms within the organization and society, and/or the employee. While the former types of stressors may affect women in lower-skilled nontraditional jobs, the latter group of stressors are more relevant to women in professional careers typically dominated by men.

An employee's role in the organization has been found to be a possible source of occupational stress (Cooper & Marshall, 1976; Beehr, Walsh, & Taber, 1976; Pelletier, 1984). Role ambiguity (originating from conflicting job demands) and the responsibility for others are some examples of stress-inducing situations. Cooper and Marshall (1976) also listed the employee's attempts at career development as a source of stress, referring to the "impact of overpromotion, underpromotion, status incongruence, lack of job security, [and] thwarted ambition" (p. 24).

The specific problems and pressures unique to female managers (as well as other female professionals) include: burdens of coping with the role of the "token woman", lack of role models and feelings of isolation, strains of coping with prejudice and sex stereotyping, and overt and indirect discrimination from fellow employees, employers and the organizational structure and climate (Larwood & Wood, 1977;

Hennig & Jardim, 1979; Nelson & Quick, 1985). The addition of work-family (dual-role) conflict to these pressures can create an enormous strain on women in full-time careers, "which may manifest [itself] in a variety of ways", including dissatisfaction with one's job (Davidson & Cooper, 1986).

In their review of the sources of conflict between the work role and the family role, Greenhaus and Beutell (1985) suggested that work-family conflict exists when: "(a) time devoted to the requirements of one role makes it difficult to fulfill requirements of another; (b) strain from participation in one role makes it difficult to fulfill requirements of another; and (c) specific behaviors required by one role make it difficult to fulfill the requirements of another" (p. 76).

Bartolome and Evans (1979) believe that "time-based conflict" can take two forms: 1) time pressures associated with membership in one role may make it physically impossible to comply with expectations arising from another role; 2) pressures also may produce a preoccupation with one role even when one is physically attempting to meet the demands of another role. The time required to perform both roles of professional career woman and family caregiver can produce such a time-based conflict. Herman and Gyllstrom (1977) found that married persons experienced more work-family conflict than unmarried persons. Bohen and Viveros-Long (1981) concluded that the spouse having the major responsibility for child-rearing may experience the most work-family conflict.

Greenhaus and Beutell's (1985) second form of work-family conflict involves role-produced strain. This type of conflict exists when strain in one role affects one's performance in another. Role ambiguity and/or conflict within one's job have been found to be positively related to work-family conflict (Jones & Butler, 1980; Kopelman, Greenhaus, & Connelly, 1983). Pleck, Staines, and Lang (1980) reported that physical and psychological work demands were positively related to several types of work-family conflict. Women in lower-skilled nontraditional careers may experience physical strain if they are required to perform tasks that demand high levels of physical strength or endurance; tasks typically designated as "man's work". The more common strain that women in nontraditional careers endure is on a psychological level. Low levels of leader support and interaction facilitation that may occur on the job appear to produce work-family conflict due to psychological strain (Jones & Butler, 1980). One extreme example of a source of this psychological strain is the sexual harassment that may occur in the male-dominated workplace (Hemming, 1985).

Work-family conflict can also arise from behavior-based conflict when specific patterns of in-role behavior are incompatible with expectations regarding behavior in another role (Greenhaus & Beutell, 1985). For women in nontraditional careers, differences may exist between expected behavior on

the job and expected behavior in family and social interactions. It has been suggested by Schein (1973) that the male, managerial stereotype emphasizes self-reliance, emotional stability, aggressiveness, and objectivity. If a woman is expected to display these characteristics in the workplace, but is expected to be warm, nurturant, emotional, and vulnerable in her interactions with family, behavior-based conflict may occur (Greenhaus & Beutell, 1985). Hemming (1985) explained the occurrence of this type of conflict as follows: "A [nontraditional career] woman must be able to display competence and compete with peers if she is to have a successful career. This requires a refusal to display traditional sex role behavior and to be assertive in task-oriented activities. This refusal means that the woman is double deviant. Deviant in not accepting her sex role and deviant in occupying a male work role" (p. 71).

The effects of occupational stress on health have been far-reaching. Physical symptoms range from the less severe (headaches, backpain), to the more serious (ulcers, hypertension), to the critical and sometimes fatal (coronary heart disease) (Cooper, 1985; Cox, 1985; Pelletier, 1984). Mental health disorders such as anxiety, depression, and substance abuse may also be the results of occupational stress (Brook, 1978; Adams, 1981). Bartolome and Evans (1980) suggested that certain stressful events at work (specifically, coping with a new job, poor job-person fit, and disappointment due to

unfulfilled expectations) produce fatigue, tension, worry, or frustration that make it difficult to pursue a satisfying non-work life. They referred to this as "negative emotional spillover" from work to non-work. Nelson and Quick (1985) reported that unique sources of stress for professional women are discrimination, stereotyping, the marriage/work interface, and social isolation. The distress and disease that often accompany stress, however, are not inevitable. According to Nelson and Quick (1985), "professional women can utilize personal resources in order to manage stress and ensure that its oucomes are healthy and productive" (p. 215). The researchers suggest that by developing strong supportive mentor relationships and working to increase her self-confidence and self-awareness, the professional woman can effectively manage stress and thus can serve as a positive role model for other women.

Social support

Social support is an important method of ameliorating the effects of the occupational stressors and role conflicts. Although, intuitively, the role of social support throughout one's lifespan is viewed as important, the concept is not clearly defined. Social support is usually interpreted as information that leads an individual to believe that she is 1) cared for and loved, 2) esteemed and valued, and 3) part of

a network of communication and mutual obligation (Cobb, 1976; Sarason, 1981). Cohen and Syme (1985) defined social support as "resources provided by other persons". (Within this broad definition falls the aspect of material or financial support, which was not included in the definition of social support used here.) In the context of coping with occupational stress, social support is defined as the information provided an individual by her peers (in the workplace) and social group members (family and friends) concerning the severity of the stress, its possible effects, and potential coping strategies for dealing with the particular stress.

Supportive social relationships have been conceptualized as operating in three possible ways to reduce the hazards of occupational stress (Williams & House, 1985). Two of these mechanisms can be called main effects. As a main effect, support can directly enhance health by providing the individual with affection, approval, social contact and security. Secondly, by reducing interpersonal tensions and generally having other positive effects in the working environment, support can directly reduce levels of stress and indirectly improve health. Williams and House (1985) continued by stating, "in either case, higher levels of support would enhance health irrespective of the level of stress" (p. 215).

The third effect of support is termed buffering or interactive. Cohen and McKay (1984) define "social support"

as a term "used widely to refer to the mechanisms by which interpersonal relationships presumably buffer one against a stressful environment" by providing resources when the individual is confronted with a stressor. They go on to say that the "buffering hypothesis states that psychosocial stress will have deleterious effects on the health and well-being of those with little or no social support, while these effects will be lessened or eliminated for those with stronger support systems" (p. 253). In other words, social support modifies the relationship between stress and health and protects the individual from the negative consequences of stress. Therefore, when exposed to stress, health risks would decline as support levels increase. The buffering hypothesis states that social support can be helpful "not only in directly reducing stress and improving health, but also in alleviating the adverse health effects of work stresses that cannot be reduced for whatever reason at a given point in time" (Williams & House, 1985).

The social support group plays another important role for the employee by providing information regarding effective coping skills and strategies. This information is made available to the individual when she uses her support groups as a source of social comparison. As reported by Cohen and McKay (1984), Social Comparison Theory "suggests that when a situation is arousing and the cause of arousal is somewhat

ambiguous, people will look to others for information about the appropriate emotional reaction" (p. 257). This theory also predicts that the stressed individual will look to others similar to herself for this relevant information. An employee compares herself to her fellow workers because they are in the same situation and have possibly experienced the same stressors. If, however, the individual is a woman in a nontraditional career, she may not perceive her "fellow" workers as similar others. If her stress is a result of her feelings of isolation and pressure due to her sex, co-workers may not be the appropriate source of social support. In fact, male co-workers may be the cause of the stress. In this case, support groups outside the workplace may be more effective in ameliorating the employee's stress. It has been found that supportive spouses may protect each other from experiencing high levels of work-family conflict (Kopelman et al., 1983). Beutell and Greenhaus (1983) found that a husband with profeminist attitudes may buffer his wife from the conflict associated with extensive involvement outside the home.

The Present Study

Statement of purpose

As stated in much of the literature regarding women's movement into atypical occupations, with this type of integration arise a variety of phenomena that may result in

women experiencing difficulty adjusting to and succeeding in nontraditional careers. These phenomena include: role conflict, perceived sex discrimination, lack of self-esteem and self-confidence, and lack of support (Darley, 1976; Lemkau, 1979; Standley & Soule, 1974; Wilson et al., 1982). These areas represent costs a woman may pay for the benefits of pursuing and keeping a career in a nontraditional field. Some women may fare better than other women, escaping the majority of frustration and self-doubt that may accompany a nontraditional career. It was the intent of this study to assess the level of adjustment and perceived success in a sample of women in nontraditional careers and to identify experiences and characteristics that distinguish the "very well-adjusted" from the "less well-adjusted". In this study, the terms adjustment and success refer to satisfaction with choice of career and with the career itself, level of work-family conflict, levels of psychological and physical health, acceptance and recognition by others, and perceived effectiveness in job performance. These aspects of adjustment and success can be both extrinsically and intrinsically based (e.g., recognition may refer to perceived fairness of promotions and pay-raises, or to praise which is intrinsically gratifying).

Hypotheses

A number of hypotheses were investigated in the present study. The primary hypothesis investigated was that specific life experiences combined with personal characteristics are related to and predictive of the levels of adjustment and perceived success experienced by women in nontraditional careers. This hypothesis is stated as follows:

Hypothesis 1: The level of adjustment and perceived success of women in nontraditional careers are positively related to and can be predicted by certain life experiences (e.g., family's socioeconomic status, past and current social support, and amount of independence) and personal characteristics (sex-role orientation).

Individual relationships among the variables were also investigated. The eight hypotheses tested for this purpose are as follows:

Hypothesis 2: Those women who experienced higher levels of social support while in high school and college are better adjusted and perceive themselves as more successful than are women with less social support during that period.

Hypothesis 3: Those women who are currently experiencing high levels of social support will be better adjusted and perceive themselves to be more successful than will women experiencing low levels of social support.

Hypothesis 4: Those women coming from families with high socioeconomic status will be better adjusted and will

perceive themselves as more successful in their careers.

Hypothesis 5: Nontraditional women will come from families with higher levels of socioeconomic status than those women holding occupations classified as traditional.

Hypothesis 6: Those women who have experienced a higher level of independence while in high school and college and who perceive themselves as more independent will be better adjusted and will consider themselves as more successful than those women with lower levels of independence.

Hypothesis 7: Women in nontraditional careers will be more independent than women in careers classified as traditional.

Hypothesis 8: Women in nontraditional careers will be more masculine and androgynous in their sex role orientations than will those in traditional careers.

Hypothesis 9: Of the women classified as holding non-traditional occupations, those with masculine or androgynous sex role orientations will be more well adjusted than those with more feminine or undifferentiated sex role orientations.

Beyond these primary and secondary relationships, the effects of a variety of potential moderators were investigated. These potential moderators were identified as age cohort, marital status, number of children in the home, and number of years on the job (tenure).

METHOD

Subjects

The participants of this study consisted of women employed as faculty and professional and scientific staff at two large midwestern universities. One hundred and forty two women in nontraditional fields were surveyed. Women's occupations were classified as "Nontraditional" if there were fewer than 20% females employed in their particular job (i.e., within their department). A comparison sample was comprised of 124 women in traditional fields. Women were classified as "Traditional" if there were more than 50% females employed in their particular job. The population from which this sample was drawn consisted of hundreds of women faculty employed at two large midwestern land-grant universities. The women were chosen for inclusion in the present study after they were identified as meeting the criteria for group (Traditional or Nontraditional) membership. This identification was conducted by utilizing the universities' 1990-1991 budget which listed, by name, the employees and their salaries for each department within each university. Refer to Appendix 1 for examples of the departments from which Traditional and Nontraditional women were drawn.

Instruments

Career Adjustment and Success Questionnaire

From the review of the literature, it was determined that there are a number of variables that influence one's choice to enter a nontraditional career and that may determine one's adjustment and success once such a career has been entered. The Career Adjustment and Success Questionnaire (CASQ) was constructed in an attempt to determine the educational, familial, and social influences experienced by this sample of nontraditional career women. The instrument contains items that attempt to gauge these women's levels of adjustment and perceived success. A number of items were included to gather demographic information that may moderate the effects of life experiences and sex role orientation upon adjustment and success. [See CASQ in Appendix 2.]

Items from a measure of life history experiences were included in the survey construction. In 1976, Owens developed a systematic method for collecting and using life history information--the Biographical Questionnaire (BQ). Eberhardt and Muchinsky (1982) investigated the factor structure of the BQ using a large sample of college students. They isolated 13 BQ factors for males and 15 BQ factors for females. From these 15 female factors, three scales were chosen for inclusion in the questionnaire constructed for this study. The factors were chosen based on those life experiences deemed

influential in the literature regarding interest and choice of a nontraditional career. The three factors are: Independence/Dominance; Warmth of Paternal/Parental Relationship; and Socioeconomic Status. Table 1 contains the title, description, and reliability estimates (Cronbach's coefficient alpha; an index of internal consistency) associated with each of the three biodata factors incorporated into the CASQ.

Table 1. CASQ biodata factors with representative items

Factor name	Description	Reliability[a]
Independence/ Dominance	Enjoyed discussion courses, participated in many small group activities, questioned teachers on course matter, regarded as radical or unconventional.	.70
Warmth of Parental Relationship	Very close to father, father gave emotional support, interest and attention, both parents gave praise, affection and attention.	.84
Socio-economic Status	High parental level of education, high parental occupation level, above average family income, parents belonged to many clubs.	.82

[a]Reliability estimates obtained from Eberhardt and Muchinsky (1982).

Items assessing level of role conflict, social support, job satisfaction, mentoring relationships, and mental and physical health were also included in the survey. Items regarding perceived success on the job were adapted from Childs and Klimoski (1986). Questionnaire items addressing mental and physical health issues were adapted from Schreiber (1979). Many of the items included in the CASQ were written by the researcher specifically for this study. Because this is a unique topic and study, no inventories addressing these topics exist in a form appropriate to the needs of this research. The study was guided by a series of ten pilot interviews of women from the nontraditional sample. The interviews provided the researcher with information from which to develop these additional items.

Bem Sex Role Inventory

The sex-role orientation of the participants was assessed using the Bem Sex Role Inventory (BSRI; Bem, 1974). The BSRI is a sixty-item paper and pencil instrument which contains a Masculinity scale and a Femininity scale, each of which contains 20 personality characteristics considered more socially desirable for males or females, respectively. (The remaining 20 items serve as filler items.) Item responses are obtained on a 7-point scale in accordance with how representative the subject considers each characteristic to be of himself or herself; higher scores indicate greater descriptive accuracy. Total scores are the average of the 20-

item responses obtained for each scale. The test-retest reliabilities associated with the Masculinity and Femininity scales are .76 and .91, respectively. [See Appendix 3.] The recommended (Bem, 1977; Spence, Helmreich, & Stapp, 1974) "median-split" method of classifying subjects into one of four sex-role categories was not used in this study. Rather, the subjects were classified based on a continuous scoring method that assesses the interaction between the two scores. Subjects were assigned three scores from the BSRI: (1) Masculinity; (2) Femininity; and (3) Androgyny (the interaction term derived from the Masculinity and Femininity scores; Lubinski, Tellegen & Butcher, 1981; Holmbeck, 1989). To reduce the effects of multicollinearity among these three variables, Androgyny scores were derived by subtracting a constant (4.8777) from Femininity scores, and a constant (4.9326) from Masculinity scores, and then multiplying the two resulting scores. This procedure allowed Androgyny to be treated as an independent variable.

Objective measure of success

In an attempt to provide an objective measure of success with which to compare subjects' self-reports of perceived success, one piece of information was obtained from personnel records. The salaries of the subjects were recorded from the university budget. Tenure (i.e., amount of time on the job) has also been utilized as a measure of success. This

information was gathered via the demographic item addressing length of time on the job.

Procedures

The surveys were distributed to the subjects via campus mail. A cover letter describing the purpose of the study and instructions for completion and return of the survey packet was included. [See cover letter in Appendix 4.] Assurance of confidentiality of responses and identity was also included in the cover letter. An identifying number was attached to each packet's return envelope for record keeping purposes. The identifier allowed the researcher to record who had responded. The questionnaire was removed from the envelope, and from that point on the subjects were known only by an assigned number. A second survey packet was sent to those subjects who had not returned their packets within ten days. The subjects keyed their survey responses onto a machine-scored answer sheet.

Statistical analyses

A variety of statistical analyses were utilized to organize and interpret the raw data gathered from the survey procedure. Descriptive statistics, correlation, multiple regression, and discriminant analyses were utilized to accomplish this goal. Relationships and differences between and among groups will be assessed as described in the following sections.

Assessment of CASQ's psychometric properties The internal consistency of the six multi-item scales comprising the CASQ was assessed by calculating the coefficient alpha for each scale. Common factor analysis was conducted to assess the construct validity of the CASQ scales. The factor structure was evaluated to determine how the items loaded and formed "scales".

Descriptive statistics Means and standard deviations for the different portions of the CASQ were computed and any significant differences between and among groups (e.g., age cohorts, marital status, traditional/nontraditional) were assessed. Frequencies for the various demographic variables were also computed.

Correlations Relationships among variables were investigated through a number of correlational procedures. Some examples of relationships of interest are: among life experiences, among levels of adjustment and success, among sex role orientations and adjustment, among life experiences and levels of adjustment and success. Moderator effects were investigated by controlling for a potential moderator (via partial correlation procedures) and assessing any change in the correlation of interest. Examples of potential moderators are age differences, marital status, number of children living at home, and length of time on the job.

Multiple regression analyses These analyses were conducted to determine the amount of variance in adjustment and success that can be accounted for by the various predictors. Full and reduced models/equations were compared, with differences between squared multiple correlations tested for significance via F-tests.

Discriminant analyses The basic issue in this type of analysis is to determine how a group of variables can be combined so as to discriminate optimally between two groups. "Consequently, the goal of discriminant analysis may be stated in terms of finding the linear combination that maximizes the variance between groups relative to the variance within groups" (Bernstein, Garbin, & Teng, 1988). Discriminant analysis tells one how to pool information optimally for purposes of classification. The three discriminant analyses conducted at this stage of the present study attempted to determine the best combination of variables for classifying subjects into one category of each of the following three groups: 1) Better Adjusted/Less Adjusted; 2) More Successful/ Less Successful; and 3) Traditional/Nontraditional.

RESULTS

Initial Analyses

The overall survey response rate for this study was 50%. Of the 266 individuals surveyed, 134 responded. Seventy-six nontraditional career women (54%) and 58 traditional career women (46%) participated by completing and returning the survey packet within the allotted time period. (40% of the participants responded to the initial survey and 10% responded to the second request, for a total of 50%.)

Psychometric assessment of the CASQ

The statistical analyses outlined in the method section were conducted using SPSS. The psychometric assessment of the CASQ provided initial evidence of the instrument's reliability and construct validity. A common factor analysis was conducted to determine if the items constructed for this study held together as actual scales. Factors were extracted using unweighted least squares method of extraction and the factor matrix was rotated using the varimax rotation method. The outcome of this factor analysis can be considered positive, as the items constructed for use in this study loaded onto factors as predicted. (The items previously constructed for use by other researchers also loaded as expected.) Three items constructed by the researcher did not load onto factors

as was anticipated. These items contained substantively important information, and therefore they were included as separate one-item scales. These items were given the scale names Current Independence, Spouse Support, and Past Mentor. See Appendix 5 for a listing of survey items comprising each scale.

The internal consistency of each the CASQ scales was assessed by computing separate Cronbach's coefficient alphas. This index of internal consistency provided support for the assumption that the items in each of the particular scales are similar in content. The internal consistencies as indexed by the coefficient alphas are presented in Table 2.

Table 2. Reliability estimates for CASQ scales

Scale Title	Reliability
I. Socioeconomic Status	.85
II. Past Independence	.55
III. Past Social Support	.81
IV. Current Social Support	.76
V. Adjustment	.93
VI. Success	.82

Descriptive statistics

The frequencies for the demographic variables are presented in Appendix 6. The frequencies are presented for the total sample (n=134) and separately for the two occupational groups. The means for five demographic variables were significantly different between the traditional and nontraditional groups. These five demographic variables were: Tenure, Age Cohort, Number of Children at Home, Planning More Children, and Length of Planned Maternity Leave. These differences are indicated by an asterisk in Appendix 6.

Primary Analyses

These analyses were conducted primarily to test the hypotheses put forth for investigation in this study. The statistical analyses were conducted using SPSS.

Differences between groups

The means and standard deviations for the primary variables of interest for the overall group of women and by career type (traditional versus nontraditional) are presented in Table 3. Higher scores on the various scales represented a higher level of the construct being measured (e.g., women in traditional careers experience significantly more Current Social Support than do women in nontraditional careers). The means for five of the variables were significantly different between the two groups of women ($p < .05$). These mean differences are also presented in Table 3.

Table 3. Means, SDs, and differences

Variable	Total (n=134)	Traditional (n=58)	Nontraditional (n=76)	Signif. Diff.[a]
SES	30.49[b]	29.19	31.49	--
	7.16	6.95	7.21	
Past Independence	23.80	23.60	23.95	--
	3.52	3.46	3.58	
Past Social Support	23.22	23.31	23.14	--
	5.56	5.44	5.69	
Current Social Support	27.46	28.81	26.42	.014
	5.60	5.25	5.67	
Sex Role	2.00	2.29	1.78	.016
	1.24	1.46	0.99	
Current Independence	4.21	4.02	4.39	.018
	.92	1.10	.71	
Spouse support	4.39	4.33	4.43	--
	.82	.89	.77	
Past Mentor	3.19	3.55	2.92	.001
	1.13	1.08	1.09	
Femininity	4.77	4.88	4.68	--
	.62	.59	.64	
Masculinity	5.04	4.93	5.12	--
	.65	.72	.58	
Androgyny	.05	.02	.07	--
	.40	.40	.40	
Adjustment	203.31	208.12	199.63	.042
	23.96	22.21	24.73	
Success	29.17	29.69	28.78	--
	4.22	4.18	4.24	

[a] p-levels listed indicate significant difference.

[b] Means are listed first, SDs are listed below means.

Table 3 also provides information regarding the support or rejection of a number of hypotheses. The results of a test for significant differences led to the rejection of Hypothesis 5, which predicted that Nontraditional women will come from families with higher levels of socioeconomic status than those women holding occupations classified as traditional. As can be seen in Table 3, while the Nontraditionals' mean score on SES was higher than the Traditionals' mean, the difference was not significant.

Hypothesis 7, on the other hand, was supported by the results of tests of significant differences. This hypothesis stated that women in nontraditional careers will be more independent than women in careers classified as traditional. Table 3 shows that this hypothesis was supported, as the mean score for Nontraditionals' Current Independence (4.39) was significantly higher than the Traditionals' mean (4.02).

The prediction that women in nontraditional careers would be more masculine and androgynous in their sex role orientations than those women in traditional careers was rejected (Hypothesis 8). As can be seen in Table 3, while the means for BSRI Masculinity and Androgyny are higher for Nontraditionals, these means are not significantly higher than the Traditionals' means.

Within the Nontraditional group, a comparison of means was conducted. The group of Nontraditionals was split according to the level of androgyny and as measured by the

BSRI. Recall that Androgyny is the interaction term derived from BF and BM, as suggested by Lubinski, Tellegen, and Butcher (1981) and Holmbeck (1989) and transformed to reduce multicollinearity. The group mean of 0.049 was used to divide the group into those considered androgynous (i.e., scoring above 0.049) and those considered as not androgynous (i.e., scoring less than 0.049). After dividing the Nontraditionals in this manner, the group means on Adjustment were observed. The two groups' (Androgynous/Non-Androgynous) means on Adjustment were not significantly different, as can be seen in Table 4. The Nontraditionals were also divided by their mean score on Masculinity (5.12). These means were not significantly different below the .05 level. These findings led to the rejection of Hypothesis 9, which predicted that of those women classified as holding nontraditional occupations, those with masculine or androgynous sex role orientations will be

Table 4. Means and SDs for Adjustment levels of Androgynous/ Non-Androgynous and Masculine/Nonmasculine Nontraditionals

Group	Mean	SD
Androgynous (n=40)	199.70	(31.27)
Non-Androgynous (n=36)	199.59	(20.64)
Masculine (n=41)	202.66	(24.74)
Nonmasculine (n=35)	196.09	(24.59)

more well adjusted than those with more feminine or undifferentiated sex role orientations.

Pearson correlations

A series of Pearson correlations coefficients were computed to determine the relationships among the two dependent variables and the eleven independent (predictor) variables investigated in this study. These correlations are presented in Table 5. Eight correlations were significant at the $p < .05$ level. The dependent variable Adjustment was positively and significantly correlated with Past Social

Table 5. Pearson correlations between the two dependent variables and the independent variables

	Adjustment	Success
Socioeconomic Status	-.03	-.07
Past Independence	-.05	-.08
Past Social Support	.22**	.12
Current Social Support	.31***	.31***
Sex Role Orientation	.13	.04
Current Independence	-.14	.06
Spouse Support	.15*	.23**
Past Mentor	.04	.04
Femininity	.24**	.08
Masculinity	.18*	.10
Androgyny	.01	-.07

*$p < .05$; **$p < .01$; ***$p < .001$.

Support (r = 0.22, p < 0.005), Current Social Support (r = 0.31, p < .001), Spouse Support (r = 0.15, p < .04), and both the BSRI's Masculinity and Femininity scales (r = 0.18 and r = 0.24, respectively). The dependent variable of Success was found to be correlated with Current Social Support (r = 0.31, p < 0.001) and Spouse Support (r = 0.23, p = .004).

Table 5 also presents the results which provided support for and/or led to the rejection of four hypotheses. Hypothesis 2 stated that those women who experienced higher levels of social support while in high school and college are better adjusted and perceive themselves as more successful than are (and do) the women who experienced less social support during that period. This hypothesis was partially supported. Table 5 shows that those with higher levels of Past Social Support were also more adjusted (r = .22), but Past Social Support was not significantly related to Success (although positively related).

It was found that those who are currently experiencing high levels of social support (i.e., Current Social Support) are also more adjusted (r = .31) and perceive themselves as being more successful (r = .31). These findings supported Hypothesis 3, which stated that those women who are currently experiencing high levels of social support will be better adjusted and perceive themselves to be more successful than

will women experiencing low levels of social support.

Hypothesis 4, which stated that those women coming from families with high socioeconomic status will be better adjusted and will perceive themselves as more successful in their careers than women coming from low SES families, was rejected because SES did not correlate significantly (nor positively) with Adjustment or Success.

Other results that led to the rejection of Hypothesis 6 can be seen in Table 5. Neither Past Independence nor Current Independence was significantly correlated with Adjustment or Success. Therefore there was no support found for the prediction that those women who have experienced a higher level of independence while in high school and college and who perceive themselves as more independent would be better adjusted and would consider themselves as more successful than those women with lower levels of independence.

The two dependent variables, Adjustment and Success, were positively and significantly correlated ($r = 0.38$, $p < .001$). This correlation between Success and Adjustment was the strongest relationship found among the variables of interest in this study.

Intercorrelations among the independent variables were also assessed. Socioeconomic Status correlated positively and significantly with Past Social Support ($r = 0.36$, $p < .001$), but negatively and significantly with Past Mentor

(r = -0.15, p < .05). Past Social Support also correlated positively and significantly with Current Social Support (r = 0.20, p < .01), Past Independence (r = 0.15, p < .05), Past Mentor (r = 0.16, p < .05), and the BSRI's Femininity scale (BF; r = 0.15, p < .05). Past Independence also correlated negatively and significantly with the one item variable, Sex Role Orientation (r = -0.17, p < .05), and positively with Current Independence (r = 0.22, p < .01), Spouse Support (r = 0.21, p < .01), and the BSRI's Masculinity scale (BM; r = 0.31, p < .001).

The one-item Sex Role Orientation variable correlated negatively and significantly with Current Independence (r = -0.28, p < .001) and Masculinity (BM; r = -0.21, p < .01), and positively with Past Mentor (r = 0.17, p < .05) and Femininity (BF; r = 0.16, p < .05). Current Independence was negatively and significantly correlated with Femininity (r = -0.20, p < .01), and positively correlated with Masculinity (r = 0.38, p < .001) and Androgyny (r = 0.18, p < .05). Femininity and Masculinity were significantly correlated (r = 0.15, p < .05), while Androgyny was not related to either Femininity or Masculinity (r = 0.00, by design).

Table 6. Correlations among the predictor variables: Life experiences and sex role orientation

	SRO[a]	BF[b]	BM[c]	Androgyny
Socioeconomic Status	-.07	-.06	.02	-.11
Past Independence	-.17*	-.04	.31***	-.01
Past Social Support	.09	.15*	.10	-.01
Past Mentor	.17*	.13	-.01	-.01
Current Social Support	.05	.23**	.09	-.11
Current Independence	-.28***	-.20**	.38***	.18*
Spouse Support	.03	-.02	.12	-.06

[a]SRO = Sex Role Orientation.

[b]BF = Femininity scale from BSRI.

[c]BM = Masculinity scale from BSRI.

*$p < .05$; **$p < .01$; ***$p < .001$.

These correlations among the predictor variables are presented in Tables 6 through 8. The correlations among the life experience and sex role orientation variables are presented in Table 6. The intercorrelations among the life experience variables and the among the sex role orientation variables are presented in Tables 7 and 8, respectively.

Table 7. Intercorrelations among life experience variables (n=134)

	1	2	3	4	5	6	7
1. SES[a]	---						
2. PIND	.05	---					
3. PSS	.36***	.15*	---				
4. PMNT	-.15*	.11	.16*	---			
5. CSS	.08	-.04	.20**	.21**	---		
6. CIND	.08	.22**	.03	-.11	-.06	---	
7. SS	-.03	.21**	.03	.05	.08	.07	---

[a]SES=Socioeconomic Status; PIND = Past Independence; PSS = Past Social Support; PMNT = Past Mentor; CSS = Current Social Support; CIND = Current Independence; SS = Spouse Support.

*p < .05; **p < .01; ***p < .001.

Table 8. Intercorrelations among sex role orientation variables (n=134)

	SRO[a]	BF	BM	Androgyny
SRO	---			
BF	.16*	---		
BM	-.21**	.15*	---	
Androgyny	-.01	.00***	.00***	---

[a]SRO = Sex Role Orientation, BF = Femininity, BM = Masculinity.

*p < .05; **p < .01; ***by design.

Partial correlations

A series of partial correlations were computed to determine if any significant moderator effects existed. The demographic variables expected to act as moderators (Tenure, Number of Children in the Home, Marital Status, and Age Cohort) were individually controlled for using partial correlations. Very few changes were observed in the resulting correlations. Those changes which did occur were very slight.

Multiple regression

The multiple regression analyses provided evidence for the predictibility of Adjustment and perceived Success via the various independent variables. The results of these regression analyses provide support for Hypothesis 1, which stated that adjustment and perceived success can be predicted by certain life experiences and personal characteristics (i.e., sex role orientation). The method of variable entry was forward selection. In forward selection, the first variable considered for entry into the regression equation is the one with the largest correlation with the dependent variable. The criterion for entry was that the probability associated with the F test must have been less than 0.05.

A total of four regression models were constructed for the total sample. These regression analyses assessed the effects of eleven independent variables upon two dependent variables. The two dependent variables of interest,

Adjustment and Success, were also used as predictor variables to assess one's effect upon the other. The dependent variables were treated as independent variables in an attempt to determine if the prediction of one's level of Success can be enhanced by considering one's level of Adjustment. The literature review conducted for this study did not produce strong evidence that one's success does not in turn affect one's adjustment on the job, therefore these relationships were investigated, as well.

The first model tested the regression of Adjustment on the predictor variables. Using forward selection, only two independent variables were entered into the regression equation: Current Social Support and Femininity. The results of this regression analysis are presented in Table 9.

The second model tested the regression of perceived Success on the predictor variables (excluding Adjustment). Two predictors successfully entered this regression equation: Current Social Support and Spouse Support. The results of this regression analysis are presented in Table 10.

The third regression model tested the regression of Success on the predictor variables, this time treating Adjustment as a predictor of Success. Three variables successfully entered the equation: Adjustment, Current Social Support, and Spouse Support. The results of this regression analysis are presented in Table 11.

Table 9. Regression results for Adjustment and predictor variables

---

Step 1: Variable entered--Current Social Support (CSS)

Multiple R .31
R Squared .10
Adjusted R^2 .09
Standard Error 22.85
$F = 14.16$, $p = .0003$, df 1,132

Step 2: Variable entered--Femininity

Multiple R .36
R Squared .13
Adjusted R^2 .11
Standard Error 22.56
$F = 9.52$, $p < .0001$, df 2,131

Table 10. Regression results for Success and predictor variables

---

Step 1: Variable entered--Current Social Support (CSS)

Multiple R .31
R Squared .10
Adjusted R^2 .09
Standard Error 4.02
$F = 14.38$ $p = .002$, df 1,132

Step 2: Variable entered--Spouse Support (SS)

Multiple R .37
R Squared .14
Adjusted R^2 .13
Standard Error 3.95
$F = 10.60$, $p = .0001$, df 2,131

The final regression model tested the regression of Adjustment (as the dependent variable) upon the predictor variables, including Success as a predictor of one's Adjustment. Three variables entered this equation: Success, Femininity, and Current Social Support. The results of this final primary regression analysis are presented in Table 12.

Table 11. Regression results for Success and predictor variables (including Adjustment)

Step 1: Variable entered--Adjustment	
Multiple R	.38
R Squared	.15
Adjusted R^2	.14
Standard Error	3.92
$F = 22.48$, $p < .0001$, df 1,132	
Step 2: Variable entered--Current Social Support	
Multiple R	.43
R Squared	.19
Adjusted R^2	.18
Standard Error	3.83
$F = 15.11$, $p < .0001$, df 2,131	
Step 3: Variable entered--Spouse Support	
Multiple R	.46
R Squared	.21
Adjusted R^2	.20
Standard Error	3.78
$F = 11.83$, $p < .0001$, df 3,130	

Table 12. Regression results for Adjustment and predictor variables (including Success)

Step 1: Variable entered--Success

Multiple R .38
R Squared .15
Adjusted R^2 .14
Standard Error 22.23
$F = 22.48$, $p < .0001$, df 1,132

Step 2: Variable entered--Femininity

Multiple R .43
R Squared .19
Adjusted R^2 .18
Standard Error 21.74
$F = 15.27$, $p < .0001$, df 2,131

Step 3: Variable entered--Current Social Support

Multiple R .46
R Squared .21
Adjusted R^2 .20
Standard Error 21.47
$F = 11.87$, $p < .0001$, df 3,130

Another series of regression analyses were conducted to determine if different predictor variables accounted for a significant amount of the variance in Adjustment and Success between the Nontraditional and Traditional groups. For the Nontraditional group, a significant amount of the variance in Adjustment was accounted for by Current Social Support ($R^2 = .09$, $F = 6.98$, $p < .01$). For the Traditional group, a significant amount of the variance in Adjustment was accounted for by Androgyny and Current Social Support ($R^2 = .17$, $F = 5.54$, $p < .01$). Current Social Support and Androgyny

accounted for 15% of the variance in Success in the Nontraditional group (F = 6.57, p < .01), while Femininity, Masculinity, and Spouse Support combined to account for 26% of the variance in Success in the Traditional group (F = 6.19, p < .001). When Adjustment was included as a predictor variable, it alone accounted for 10% of the variance in Success in the Nontraditional group, while Adjustment alone accounted for 27% of the variance in Success in the Traditional group (F = 20.61, p < .0001).

Discriminant analyses

Analysis stage The results from the multiple discriminant analysis for the simple model (excluding Success) of Adjustment are presented in Table 13. For this model, the membership into the group variables was determined by utilizing the total sample's mean score on Adjustment as the cut-off between Better Adjusted and Less Adjusted. The discriminating variables included the four sex role orientation variables and the life experiences. Table 13 shows the eigenvalue, Wilk's Lambda, canonical correlation, chi-square test, and significance level for the discriminant function. As can be seen the function was statistically significant.

Table 13. Canonical discriminant function for simple model of Adjustment (n=134)

Eigenvalue	Wilk's Lambda	Canonical Correlation	X^2
.359	.736	.510	38.85*

*$p < .0001$.

Table 14 presents the standardized canonical discriminant function coefficients for the statistically significant discriminant function. The interpretation of these coefficients is analogous to betas in multiple regression analysis. Accordingly, their relative magnitudes represent the relative contribution, or importance, of the discriminating variables to the discrimination between the groups. For this function the life experience variables Current Social Support (-.526) and Current Independence (-.517) appear to contribute the most to group discrimination. Because the standardized coefficients may lack stability due to multicollinearity, however, many psychometricians recommend that structure coefficients be used for the interpretation of the discriminant functions (Pedhazur, 1982).

The structure coefficients, also referred to as the pooled within-groups correlations between the discriminating

Table 14. Standardized canonical discriminant function coefficients for statistically significant discriminant function for simple model of Adjustment (n=134)

Variables	Function I
Socioeconomic Status	0.373
Past Independence	-0.085
Past Social Support	-0.293
Current Social Support	-0.526
Sex Role Orientation	-0.325
Current Independence	0.517
Spouse Support	-0.247
Past Mentor	0.318
Femininity	-0.314
Masculinity	-0.278
Androgyny	-0.272

functions and the discriminating variables, are presented in Table 15. Following the rule of thumb suggested by Pedhazur (1982), only those structure coefficients greater than or equal to .30 are interpreted as meaningful. Only such meaningful structure coefficients are included in Table 15. A total of four discriminating variables were found to be meaningful using this definition.

Table 15. Meaningful pooled within-groups correlations between discriminating variables and statistically significant canonical discriminant function for simple model of Adjustment (n=134)

Variables	Function I
Femininity	-0.517
Current Social Support	-0.496
Current Independence	0.391
Sex Role Orientation	-0.372

The group centroids resulting from the discriminant analysis were computed for the statistically significant function. The group centroids reflect the mean for each of the two levels of Adjustment. The group centroid for Group 1 (Less Adjusted) was 0.613, and the group centroid for Group 2 (Better Adjusted) was -0.578.

The results from the multiple discriminant analysis for the simple model (excluding Adjustment) of Success are not presented in tabular form. As with Adjustment, the level of Success was determined using the total sample's mean score on Success as a cut-off. Membership in one of the two groups (More Successful or Less Successful) was determined by one's score on Success. Similar to the simple model for Adjustment, the discriminating variables included the four sex role orientation variables and the seven life experience variables. However, this function was not significant below the 0.05

level, therefore no other results will be presented.

The results from the multiple discriminant analysis for the full model (including Adjustment) of Success are presented in Table 16. As with the simple model of Success, group membership was determined using the mean Success score as the cutoff. The discriminating variables were the sex role orientation variables, life experience variables, and Adjustment. Table 16 shows the eigenvalue, Wilk's Lambda, canonical correlation, chi-square test, and significance level for the discriminant function. As can be seen, this function was significant below the 0.05 level.

Table 16. Canonical discriminant function for full model of Success (n=134)

Eigenvalue	Wilk's Lambda	Canonical Correlation	X^2
0.203	0.831	0.411	23.31*

*$p = .025$.

The standard canonical discriminant function coefficients for the statistically significant function for the above model are presented in Table 17. For this function, Adjustment (.496) and Spouse Support (.475) appear to contribute the most to group discrimination.

Table 18 presents the significant, or meaningful, pooled within-groups correlations (structure coefficients) between the statistically significant discriminant function and the discriminating variables for the full model of Success. As can be seen, a total of four variables comprise the meaningful structure coefficients for this discriminant function.

Table 17. Standardized canonical discriminant function coefficients for statistically significant discriminant function for full model of Success (n=134)

Variable	Function I
Adjustment	0.496
Socioeconomic Status	-0.353
Past Independence	-0.171
Past Social Support	-0.188
Current Social Support	0.356
Sex Role Orientation	-0.078
Current Independence	0.362
Spouse Support	0.475
Past Mentor	0.036
Femininity	-0.002
Masculinity	0.137
Androgyny	0.008

Table 18. Meaningful pooled within-groups correlations between discriminating variables and statistically significant canonical discriminant function for full model of Success (n=134)

Variables	Function I
Adjustment	0.627
Spouse Support	0.524
Current Social Support	0.486
Masculinity	0.367

The group centroids resulting from the discriminant analysis were computed for the statistically significant function. The group centroids reflect the mean for each group on the function. The group centroid for Group 1 (Less Successful) was -0.454, and the group centroid for Group 2 (More Successful) was 0.441.

The results from the multiple discriminant analysis for the full model for Adjustment (i.e., including Success as a predictor) are presented in Table 19. Again, membership in one group (Better Adjusted or Less Adjusted) was determined using the total sample mean for Adjustment as a cutoff, resulting in two groups. Table 19 shows the eigenvalue, Wilk's Lambda, canonical correlation, chi-square test, and significance level for the function. As can be seen, the discriminant function was statistically significant.

Table 19. Canonical discriminant function for full model of Adjustment (n=134)

Eigenvalue	Wilk's Lambda	Canonical Correlation	X^2
.420	.704	.544	44.22*

*$p < .0001$.

The standardized canonical discriminant function coefficients for the statistically significant function are presented in Table 20. For this function, as with the simple model of Adjustment, the life experience variable Current Independence (.540) appears to contribute the most to group discrimination.

Table 20. Standardized canonical discriminant function coefficients for statistically significant discriminant function for full model of Adjustment (n=134)

Variables	Function I
Success	-0.414
Socioeconomic Status	0.296
Past Independence	-0.150
Past Social Support	-0.224
Current Social Support	-0.392
Sex Role Orientation	-0.308
Current Independence	0.540
Spouse Support	-0.147
Past Mentor	0.285
Femininity	-0.301
Masculinity	-0.245
Androgyny	-0.287

Table 21 shows the significant, or meaningful, pooled within-groups correlations (structure coefficients) between the statistically significant discriminant function and the discriminating variables. As can be seen, a total of five variables comprised the meaningful structure coefficients in this discriminant function.

Table 21. Meaningful pooled within-groups correlations between discriminating variables and statistically significant canonical discriminant function for full model of Adjustment (n=134)

Variables	Function I
Femininity	-0.478
Success	-0.464
Current Social Support	-0.459
Current Independence	0.362
Sex Role Orientation	-0.344

The group centroids resulting from the discriminant analysis were computed for the discriminant function. The group centroid for Group 1 (Less Adjusted) was .663, and -.625 for Group 2 (Better Adjusted).

A third categorical variable utilized for discriminant analysis purposes was that of Traditional/Nontraditional. The results from the multiple discriminant analysis for the simple model of Traditionality are presented in Table 22. The

discriminating variables were the sex role orientation variables and the life experience variables. Table 22 shows the eigenvalue, Wilk's Lambda, canonical correlation, chi-square test, and significance level for the discriminant function. As can be seen, this function was significant below the 0.01 level.

Table 22. Canonical discriminant function for simple model of Traditionality (n=134)

Eigenvalue	Wilk's Lambda	Canonical Correlation	X^2
.222	0.819	0.426	25.32*

*$p < .01$.

The standard canonical discriminant function coefficients for the simple model's function are presented in Table 23. For this function, Past Mentor (.466) and Current Social Support (.433) appear to contribute the most to group discrimination.

Table 24 presents the significant, or meaningful, pooled within-groups correlations (structure coefficients) between the statistically significant discriminant function and the discriminating variables for the simple model of Traditionality. As can be seen, a total of seven variables

comprise meaningful structural coefficients for this discriminant function.

Table 23. Standardized canonical discriminant function coefficients for statistically significant discriminant function for simple model of Traditionality (n=134)

Variables	Function I
Socioeconomic Status	-0.335
Past Independence	0.093
Past Social Support	-0.034
Current Social Support	0.433
Sex Role Orientation	0.280
Current Independence	-0.166
Spouse Support	-0.217
Past Mentor	0.466
Femininity	0.185
Masculinity	-0.306
Androgyny	-0.146

Table 24. Meaningful pooled within-groups correlations between discriminating variables and statistically significant canonical discriminant function for simple model of Traditionality (n=134)

Variables	Function I
Past Mentor	0.616
Current Social Support	0.461
Sex Role Orientation	0.451
Current Independence	-0.444
Socioeconomic Status	-0.343
Femininity	0.332
Masculinity	-0.313

The group centroids resulting from the discriminant analysis were computed for the function. The group centroids reflect the mean for each group on the function. The group centroid for Group 1 (Traditional) was 0.535, and the group centroid for Group 2 (Nontraditional) was -0.408.

The results from the multiple discriminant analysis for the full model for Traditionality (including Adjustment and Success) are presented in Table 25. This table shows the eigenvalue, Wilk's Lambda, canonical correlation, chi-square test, and significance level for the function. As can be seen, the discriminant function was statistically significant below the 0.01 level.

Table 25. Canonical discriminant function for full model of Traditionality (n=134)

Eigenvalue	Wilk's Lambda	Canonical Correlation	X^2
.248	.802	.446	27.77*

*$p < .01$.

The standardized canonical discriminant function coefficients for the function are presented in Table 26. For this function, as with the simple model of Traditionality, the discriminating variable Past Mentor (.484) appears to contribute the most to group discrimination.

Table 26. Standardized canonical discriminant function coefficients for statistically significant discriminant function for full model of Traditionality (n=134)

Variables	Function I
Adjustment	0.326
Success	0.101
Socioeconomic Status	-0.277
Past Independence	0.139
Past Social Support	-0.113
Current Social Support	0.314
Sex Role Orientation	0.247
Current Independence	-0.110
Spouse Support	-0.277
Past Mentor	0.484
Femininity	0.152
Masculinity	-0.373
Androgyny	-0.158

Table 27 shows the significant, or meaningful, pooled within-groups correlations (structure coefficients) between the statistically significant discriminant function and the discriminating variables. As can be seen, a total of seven variables comprised the meaningful stucture coefficients for this discriminant function.

The group centroids resulting from the discriminant analysis were computed for the discriminant function. The group centroid for Group 1 (Traditional) was 0.565, and the group centroid for Group 2 (Nontraditional) was -0.431.

Table 27. Meaningful pooled within-groups correlations between discriminating variables and statistically significant canonical discriminant function for full model of Traditionality (n=134)

Variables	Function I
Past Mentor	0.582
Current Social Support	0.436
Sex Role Orientation	0.426
Current Independence	-0.420
Adjustment	0.360
Socioeconomic Status	-0.325
Femininity	0.314

Classification stage The functions developed in the analysis stage were used to classify subjects into groups, thereby testing the usefulness of the functions for classification purposes. The classification results for the five significant functions are presented in Table 28.

These classification results were subjected to a test of significance recommended by numerous researchers (e.g., Cohen, 1960; Fleiss, 1973). It is important to measure more than just the observed proportion of subjects classified correctly (p_o). The researcher must also know the proportion of group membership expected by chance alone (p_c). According to Fleiss (1973), "a better measure of agreement than p_o alone is $p_o - p_c$, that is, how much agreement exists beyond the amount expected by chance" (p. 146). It is suggested that the statistic kappa (K; see Cohen, 1960) be used in this instance.

In Cohen's (1960) words, "the coefficient K is simply....the proportion of agreement after chance agreement is removed from consideration" (p. 40):

$$K = \frac{p_o - p_c}{1 - p_c}.$$

Once kappa is obtained, it can be tested for significance by computing the standard error for K ($s.e._K$) using the following formula (where N = number of subjects, and n = number of raters [i.e., chance vs. discriminant function]; Fleiss, Nee, & Landis, 1979):

$$s.e._K = \sqrt{\frac{2}{Nn(n - 1)}}.$$

The significance is determined by dividing [K + 1/N(n-1)] by $s.e._K$ and referring the resulting critical ratio (i.e., z-score) to the normal curve (Cohen, 1960; Fleiss, 1973; Fleiss et al., 1979). According to Fleiss (1973), "if z is significantly large, the conclusion would be that the observed degree of agreement reflects bona fide reliability" (p. 147). The kappas obtained for each of the five classification models are presented in Table 29. As can be seen, each kappa was considered significant, and each is therefore supportive of the significance and reliability of the classification models. Each z-score was significant at $p < 0.001$..ls1

Table 28. Classification results for simple and full models of Adjustment, Success, and Traditionality (n=134)

Actual Group	# of Cases	Predicted Group Membership 1	2	Percent Correct
1. Simple model of Adjustment				
Group 1 (Less Adjusted)	65	47 (72.3%)	18 (27.7%)	70.9%
Group 2 (Better Adjusted)	69	21 (30.4%)	48 (69.6%)	
2. Full model of Adjustment				
Group 1 (Less Adjusted)	65	50 (76.9%)	15 (23.1%)	73.9%
Group 2 (Better Adjusted)	69	20 (29.0%)	49 (71.0%)	
3. Full model of Success				
Group 1 (Less Successful)	66	42 (63.6%)	24 (36.4%)	65.7%
Group 2 (More Successful)	68	22 (32.4%)	46 (67.6%)	
4. Simple model of Traditionality				
Group 1 (Traditional)	58	35 (60.3%)	23 (39.7%)	65.7%
Group 2 (Nontraditional)	76	23 (30.3%)	53 (69.7%)	
5. Full model of Traditionality				
Group 1 (Traditional)	58	39 (67.2%)	19 (32.8%)	70.2%
Group 2 (Nontraditional)	76	21 (27.6%)	55 (72.4%)	

Table 29. Significance of classification models, using the statistic kappa as an index (N=134)

1. Simple model of Adjustment:

$K = 0.418$ $\quad p_c = (.485)(.507)+(.515)(.493)$
$s.e._K = 0.086$ $\quad p_o = .709$

$z = 4.95^*$

2. Full model of Adjustment:

$K = 0.477$ $\quad p_c = (.485)(.522)+(.515)(.478)$
$s.e._K = 0.086$ $\quad p_o = .739$

$z = 5.63^*$

3. Full model of Success:

$K = 0.311$ $\quad p_c = (.495)(.478)+(.507)(.522)$
$s.e._K = 0.086$ $\quad p_o = .657$

$z = 3.70^*$

4. Simple model of Traditionality:

$K = 0.303$ $\quad p_c = (.433)(.433)+(.567)(.567)$
$s.e._K = 0.086$ $\quad p_o = .657$

$z = 3.61^*$

5. Full model of Traditionality:

$K = 0.396$ $\quad p_c = (.433)(.448)+(.567)(.552)$
$s.e._K = 0.086$ $\quad p_o = .702$

$z = 4.69^*$

$^*p < 0.001$.

DISCUSSION

Initial Analyses

These analyses consisted of psychometric assessments of the survey instrument constructed for and utilized in data collection for the present research. The CASQ was determined, upon review of internal consistency of scales and a factor analysis of items, to be a reasonably reliable and construct valid instrument for use in exploratory research.

Descriptive statistics were also computed at this stage to itemize the demographic characteristics of the research sample. The major differences between the two groups were in mean age and tenure. While 75 percent of the Traditional group was 45 years old or more, 78% of the Nontraditionals were under 45 years of age. Sixty four percent of the Traditionals and only 20% of the Nontraditionals had held their positions ten or more years. Other than number of children in the home (Nontraditionals had more young children, probably due to the younger mean age), the two groups were very similar in their demographic characteristics.

Primary Analyses

These analyses were conducted to test the hypotheses put forth in the statement of purpose. A variety of statistical

analyses were used to address a variety of research questions. The following sections interpret and outline the findings of this research.

Hypotheses

The primary hypothesis investigated in this study was that specific life experiences combined with personal characteristics are related to and predictive of the levels of adjustment and perceived success experienced by women in nontraditional careers. This hypothesis was supported by the findings of this research in two manners.

First, the regression analyses identified those factors that explained the largest proportion of variance in adjustment and perceived success for women in general (i.e., both the traditional and nontraditional groups in this sample), as well as for a more specific group of nontraditional career women. Those factors accounting for the largest amount of variance in Adjustment for the entire sample were the current level of social support and sex role orientation toward femininity. Over a fifth of the variance in Adjustment was accounted for if Success was used as a predictor (along with Femininity and Current Social Support. While only 14% of the variance in Success was accounted for by Current Social Support and Spouse Support, this proportion jumped to 21% when Adjustment was used as a predictor variable. Not only do these findings support the primary

hypothesis that certain life experiences and personal characteristics are related to and predictive of adjustment and perceived success, they also provide evidence of a strong, yet somewhat unclear relationship between adjustment and success. These findings bring to mind "the chicken or the egg" question that can usually only be answered via causal analysis and longitudinal research.

When the regression analyses were conducted separately for the two groups, it was interesting to discover that different experiences accounted for significant amounts of variance between the groups. Current Social Support appeared to be the most influential factor accounting for the variance in both Adjustment and Success for the Nontraditional group. While, for the Traditionals, sex role orientation (Femininity, Masculinity, and Androgyny) seemed to be the key factor in accounting for variance in Adjustment and Success.

The second manner through which the primary hypothesis was supported was with the series of discriminant analyses. These analyses provided another method of determining which life experiences and sex role orientations are most useful in understanding the predictors and possible causes of adjustment, success, and traditionality of career choice. Again, social support and sex role orientation played an important role in discriminating among levels of adjustment and perceived success. The classification stage of the discriminant analyses provided support for the utility of life

experiences and sex role orientations as useful classification tools when discriminating among the well-adjusted and less well-adjusted; the more successful and the less successful; and those choosing to pursue traditional careers and those choosing nontraditional careers.

The additional hypotheses that were supported by the results of this study are Hypotheses 2, 3, and 7. It was found that those women who experienced higher levels of social support while in high school and college were, in fact, better adjusted and perceived themselves as more successful (although, only the relationship with adjustment was significant) than those with less Past Social Support. It was also found that, indeed, those women currently experiencing high levels of social support were better adjusted and perceived themselves to be more successful than those women experiencing low levels of Current Social Support. These two supported hypotheses also provide further evidence in support of the benefits (both direct and indirect) of supportive social relationships (as reported by Williams & House, 1985; and Cohen & McKay, 1984).

Another hypothesis that was supported by the results of this study is the notion that women in nontraditional careers are more independent than women in careers classified as Traditional. While independence has often been reported as a predictor of interest in and choice of a nontraditional major

and/or career (e.g., Winters & Sorensen, 1975; Darley, 1976), there were no significant differences found in the level of Past Independence experienced by the women in the two groups. It may be that these nontraditional career women believe that they are more independent <u>because</u> they have chosen a career in a nontraditional field.

One hypothesis that was not supported by the results of this study was that stating that of the women classified as holding nontraditional occupations, those with masculine or androgynous sex role orientations will be more well-adjusted than those with more feminine or undifferentiated orientations. Support was not found for the relationship among adjustment and androgyny within the Nontraditionals, nor for the relationship between adjustment and Masculinity. This finding may show evidence of a gradual change away from the findings of the 1970s and early 1980s. The change on the part of women away from adopting stereotypic male role behavior to "fit-in" at work, and toward developing a more "well-rounded" orientation that combines high levels of both positive masculine and positive feminine attributes. This finding may also support the idea that feminine attributes are beginning to be valued in the workplace and that recognition may be leading to adjustment. It is interesting to note at this point that Hypothesis 8 was not supported by the present findings. This hypothesis predicted that women in nontraditional careers would be more masculine and androgynous

in their sex role orientations than would those women in traditional careers. Such was not the case. In fact, the adjustment of women in traditional careers was influenced greatly by Androgyny, while Androgyny played a fairly substantial role in explaining the success of Nontraditionals. Current Social Support was more useful in explaining the Nontraditionals' Adjustment, while Femininity and Masculinity combined with Spouse Support accounted for over a quarter of Traditionals' Success.

Hypotheses 4, 5, and 6 were not supported by the results of this study. The rejection of the hypotheses addressing socioeconomic status of women (4 and 5) may be due to the homogeneous nature of the sample (i.e., all college educated and holding steady, professional jobs). The rejection of these hypotheses provide no support for the well-published finding that SES does effect career choice. Hypothesis 6 stated that women who experienced higher levels of independence while growing up and who perceive themselves as more independent will be better adjusted and more successful than those with lower levels of independence. The rejection of this hypothesis may have been due to the fact that independent women may want full autonomy, but are not allowed to achieve such status. The denial of full control over one's work (i.e., the absence of independence) may prove very frustrating. This frustration may be manifested in

dissatisfaction or poor mental health (i.e., maladjustment). Therefore, in theory, independent employees should be both well-adjusted and successful, but in reality--this independence may prove detrimental.

Differences between Traditionals and Nontraditionals

Many other (unhypothesized) relationships were investigated in the present study. The two groups of women varied significantly on five of the variables under investigation. Fewer Nontraditionals had role models or mentors as they were growing up (Past Mentor). Nontraditionals had higher levels of Current Independence and are less-traditional in their Sex Role Orientation. Traditionals, on the other hand, experience more Current Social Support and have higher levels of Adjustment than do those women holding nontraditional careers.

It may be that if Nontraditionals had experienced the assistance of a mentor or the presence of a role-model, these women would be better adjusted. Many researchers have found support for the importance of role-models and mentors, while individuals are growing up and as adults (e.g., Muchinsky, in press; Nelson & Quick, 1985; Morrison & Von Glinow, 1990). These findings may also be interpreted as follows: Nontraditionals, perceiving themselves as more independent, may be less likely to seek-out social support than are Traditionals. It may be that Nontraditionals are receiving

more social support at home, and therefore do not utilize other means of social support. In fact, Nontraditionals did report higher levels of Spouse Support than did Traditionals.

Correlations among variables

Five variables correlated significantly with Adjustment. Three of these were life experiences (Past Social Support, Current Social Support, and Spouse Support). The remaining two variables were sex role orientation variables (Femininity and Masculinity). Of these variables, Current Social Support and Femininity were most strongly related to Adjustment. These relationships can be interpreted in the following manner: The more Feminine one's sex role orientation and the higher one's level of Current Social Support, the better adjusted the individual. Femininity and Current Social Support were also related to one another ($r = .23$, $p < .01$).

While only two variables were significantly correlated with Success, these two variables were also social support constructs: Current Social Support and Spouse Support. Adjustment and perceived Success, the two dependent variables in this study, were correlated significantly ($r = .38$, $p < .001$). This relationship can be stated two ways: 1) the more adjusted one is, the more successful the individual will perceive herself to be; or 2) the more successful one feels one is, the more adjusted one will be. This relationship brings up the issue of causation; an issue not addressed in

this study. This is an area worthy of further study.

When assessing the intercorrelations among the predictor variables, several relationships are discovered. Eight significant correlations exist among the life experience variables (see Table 8). Those women raised in families with high levels of SES also experienced higher levels of Past Social Support, but were less likely to have experienced the presence of a role-model or mentor than were the women from lower SES families. Those women who experienced higher levels of independence while growing up also experienced higher levels social support (while growing up) and are now experiencing higher levels of spouse support and are currently more independent than those women who experienced less independence. Women who experienced more social support while growing up were more likely to have experienced the presence of a role-model or mentor and are currently experiencing more social support. Those women currently experiencing higher levels of social support were more likely to have experienced the presence of a role-model or mentor as they were growing up. Although experiencing the presence of a role-model or mentor did not correlate with adjustment or perceived success, this experience may be influential in seeking out social support as an adult, which has been shown to be highly related to adjustment and success for both traditional and nontraditional career women.

Significant intercorrelations among sex role orientation variables were also found in the correlational analyses. The Sex Role Orientation (SRO) item constructed for this survey correlated positively with Femininity and negatively with Masculinity. SRO assessed subjects' perceived sex role orientation in terms of how closely they feel they fit the traditionally stereotypic female roles. These correlations can be interpreted as follows: 1) The more Feminine one's sex role, the more traditionally one views one's self; and 2) The more Masculine one's sex role orientation, the less traditionally one views one's self. Femininity and masculinity are positively correlated. This relationship can be interpreted as meaning--the stronger one's Feminine sex role orientation, the stronger one's Masculine orientation. Androgyny was not found to be related to one's perception of traditionality of sex role orientation.

Relationships among life experiences and sex role orientation variables were found. The strongest relationships were observed between Current Independence and SRO, BF, and BM. Current Independence was negatively related to SRO and Femininity, and positively related to Masculinity. Past Independence was also negatively related to SRO and positively related to Masculinity. Past Social Support was positively related to Femininity. One other positive correlation, between Past Mentor and SRO, was significant.

Salary, tenure, and success

The use of objective measures of performance (i.e., success) is encouraged and supported in research addressing most topics having anything to do with the workplace. While the fields of industrial psychology and organizational behavior struggle to advance and expand, most research regarding performance falls back on salary as the primary means of measuring level of achievement. In an attempt to determine how perceived success related to one's actual salary, a number of analyses were conducted. Correlational analyses found that actual salary was significantly and positively related to perceived Success (r = .17, p < .05), as well as Current Independence and Masculinity (r = .22 and r = .23, respectively, both with p < .005). In other words, the higher one's salary, the more successful one felt, and the more independent and masculine one's orientation. Again, causation cannot be addressed in this study. Salary was not found to be related to one's level of adjustment. Regression analysis using Salary as the dependent variable found that Masculinity and Femininity accounted for 8% of the variance in Salary. While the relationship between salary and perceived success provides a certain legitimacy to the self-report measure of success, this relationship does not provide any explanation of the temporal ordering of the two types of success. Does a women see herself as more successful because she is earning a good salary, or does she receive consistent

raises as a result of her manifested perceived success?

Another often used index of success is the amount of time in the current position (i.e., tenure). Research regarding success has suggested that the longer one stays in a position the more successful the individual. The findings of this study suggest that while women who had held their jobs longer made considerably higher salaries and reported higher levels of adjustment, they did not perceive themselves to be more successful than did those women who had held their positions for shorter amounts of time.

General Discussion

This research project was undertaken as an attempt to integrate two broad bodies of literature regarding occupational behavior. The first area was that of females' interest in nontraditional college majors and careers. The second area of research was that detailing predictors of adjustment (or well-being) and success. By integrating these two areas it is hoped that the results provided insight into an unknown and unresearched area of organizational behavior. This research was undertaken as an attempt to provide useful information that will aid in women's adjustment and success in nontraditional careers. While women's issues in the workplace are often the topic of discussion and research projects, this

specific type of research has not been conducted.

Throughout the course of this research, it was found that while significant amounts of the variance in adjustment and success can and were accounted for by a variety of life experiences and personal characteristics (i.e., sex role orientations), a large amount of the variance in these dependent variables were not addressed by individual characteristics. Strong support for one or two very influential factors was not found. The lack of strong predictors accentuates the notion that the causes of one's adjustment and success in the workplace are numerous, varied, and complex. This finding emphasizes the need for further research into the areas of adjustment and success of women in the workplace, specifically women in nontraditional careers.

Future research

This study attempted to address the personal life experiences and characteristics that influence women's adjustment and success. Another important area that was not addressed in this research is the impact of organizational factors upon women's adjustment and perceived success. Although the women classified as Nontraditional for this study were compared to women in more traditional careers, it is also important to compare women in these nontraditional careers with the men in their field. This level of comparison would identify potential organizational causes of maladjustment and

may determine if gender differences exist in the predictors of adjustment and perceived success. It is also important for generalizability purposes to conduct similar research with different samples of nontraditional career women. The sample in the present study was a very homogeneous group of professional women. The adjustment and perceived success of women in blue-collar jobs should also be assessed.

A final topic for future research is that of the causal ordering of life experiences and sex role orientational influences upon women's adjustment and success in nontraditional careers, as well as the temporal ordering of the adjustment/success relationship. Longitudinal research designs combined with structural equation modeling may begin to address the "chicken or the egg" debate.

Implications for management practices

While the "creation of an androgynous perception of the occupational structure early in the lives of children is perhaps the most vital factor for assisting subsequent nontraditional occupational aspirations" (Auster & Auster, 1981; pp. 260-261), there are steps that managers can take to ensure an environment which is supportive of occupational integration and is sensitive to the needs of employees in nontraditional roles. Freedman and Philips (1988) emphasized the need for expanded research into the realm of women in the

workplace (especially professional women) because the increasing number of women able to attain nontraditional positions has "resulted in new and sometimes unanticipated problems for practicing managers" (p. 241).

The literature addressing sex and gender differences in organizational behavior argues fairly consistently that women in nontraditional occupations develop attitudes, needs, and values similar to their male counterparts (Terborg, 1977). Araynya, Kushnir, and Valency (1986) suggested that where sex differences are found, researchers and practitioners should look to the organizational structure rather than to internal, personality variables. This prescription was consistent with Kanter's (1977) suggestion that in order to analyze organizational behavior in terms of sex differences, the organizational structure must first be analyzed. If, however, differences are found in the level of adjustment and success experienced by nontraditional women, it is important to identify the variables accounting for these differences. Only after the factors influencing their levels of adjustment and success have been identified, can we begin to change the structure of the organization to allow for an increase of this adjustment and success.

Limitations of the study

There are some issues involved in the design of the present study that may have constrained or limited the generalizability of the results. The subjects used in this

study work in a very special type of organization: The university or academic setting. Academia tends to be an atmosphere that is less structured than the typical corporation. It may be that a nontraditional woman is not well-adjusted, but may still succeed in her career because she stays in her office and concentrates on her research activities, rather than interacting with her chairperson or colleagues. Another limiting aspect of this research is the use of the survey method of data collection. Because those responding to the survey were volunteer subjects, they may not by as representative of nontraditional/traditional women as would be a random sample taken from the general population. The sample used in this research was fairly homogeneous. While the two groups were classified as Traditional and Nontraditional, all were highly educated women, many having Ph.D.s. Some may say that all women with this much education and working as university faculty should be classified as Nontraditional. While this fact may have limited the findings of this research, they were limited in a conservative direction. Future researchers may want to identify a more divergent comparison group for further research in the area of adjustment and success.

General Conclusions

Because this research was exploratory in nature, some of the hypothesized relationships were not supported. This study does, however, add quite a bit of information to the knowledge base regarding adjustment and success generally, and women in nontraditional careers, specifically. It seems as if the questionnaire developed for the study was both general enough to address the variety of variables that may influence adjustment and perceived success, and detailed enough to discriminate among groups. Future research projects should address each of these variables in more detail.

There are still relatively few women in visible positions of power and influence within this country's corporations and therefore there are few role models and few examples of successful "nontraditionals" from whom managers and new female employees can gain valuable information, and through whom societal norms may begin to progress and advance. Slowly the stereotypes are changing, and slowly the integration of the workplace will render the term "nontraditional" obsolete.

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APPENDIX 1:

EXAMPLES OF TRADITIONAL AND NONTRADITIONAL POSITIONS

TRADITIONAL

Art and Design
Elementary Education
Secondary Education
Human Development and
  Family Studies
Food Science and Human
  Nutrition
English
Foreign Languages
Textiles and Clothing

NONTRADITIONAL

Biology
Chemistry
Geology
Physics and Astronomy
Political Science
Geography
Marketing
Management
Finance
Economics
Neurology
Law
Anatomy
Medicine
Pharmacy
Accounting
Statistics
Engineering
Architecture

APPENDIX 2:

CAREER ADJUSTMENT AND SUCCESS QUESTIONNAIRE

Questionnaire

Please answer the following questions by filling in the appropriate "bubble" on the green answer sheet. Please use a pencil.

1. How long have you held your current position?

   a.less than one year b.1-3 yrs c.4-5 yrs d.6-10 yrs e.10+ yrs

2. Do you plan a change of jobs within the next two years?

   a.definitely b.probably c.possibly d.probably not e.definitely not

3. Do you plan a change of careers (i.e., leaving this specialty area) within the next two years?

   a.definitely b.probably c.possibly d.probably not e.definitely not

4. How old are you? a.21-28 b.29-34 c.35-39 d.40-44 e.45-49 f.50-54 g.55+

5. What is your marital status? a.single b.living with a "life-partner" c.married d.divorced e.widowed

6. How many children do you have living with you?

   a.0 b.1 c.2 d.3 e.4 or more

7. How many children do you plan to have? (Don't count those you have now, just those you plan to have in the future.)

   a.0 b.1 c.2 d.3 e.4 or more

8. Do you plan to continue working after you have (more) children?

   a. I don't plan to have any(more) children.
   b. Yes--returning to work as soon as possible.
   c. Yes--after a prolonged maternity/paternity leave (i.e., months)
   d. Yes--after a few years off
   e. No--I don't plan to continue working after I have children.

9. How many siblings do you have? a.0 b.1 c.2 d.3 e.4 or more

10. What position in the birth order are you?

    a.oldest b.middle c.youngest d.only child

11. What is your highest level of education?

    a. BA or BS degree
    b. some graduate school, but no advanced degree
    c. MA, MBA, or MS degree
    d. Ph.D., DBA, or MD
    e. Post doctoral training

12. How old were you when you became interested in your field (not necessarily the specific occupation, but the area)?

a. as long as you can remember
b. early grade school
c. about age 10
d. in junior high
e. in high school
f. in college
g. I'm still not interested

LIFE EXPERIENCES

13. In school, how often did you discuss intimate and/or important matters with your parents?

a.very often b.often c.sometimes d.seldom e.never

14. How often have you set difficult goals for yourself which you still attempt to reach?

a.very often b.often c.sometimes d.seldom e.never

15. In school, how often do you think you were regarded as radical or unconventional?

a.very often b.often c.sometimes d.seldom e.never

16. How interested were your parents in activities in which you engaged?

a.very much b.much c.some d.little e.very little

17. In comparison with others in your high school classes, how much did you question your teacher on subject matter?

a.very much b.much c.some d.little e.very little

18. In college & high school, how much did you enjoy discussion classes?

a.very much b.much c.some d.little e.very little

19. During high school, how much did you try to become like one of your parents?

a.very much b.much c.some d.little e.very little

20. To what extent have you tried to be like your father?

a. great extent
b. large extent
c. moderate extent
d. slight extent
e. not at all

21. In a group discussion, to what extent have you tended to try to make others see your point of view?

    a. great extent
    b. large extent
    c. moderate extent
    d. slight extent
    e. not at all

22. Relative to your friends, how much time did you spend with your father during high school?

    a. much more than my friends
    b. more than my friends
    c. about the same as my friends
    d. less than my friends
    e. much less than my friends

23. Compared to your friends, how much independence do you feel your parents allowed you while in high school?

    a. much more than my friends
    b. more than my friends
    c. about the same as my friends
    d. less than my friends
    e. much less than my friends

24. In high school, when you were a member of a small group, how much did you participate?

    a. much more than others in the group
    b. more than others in the group
    c. about the same as others in the group
    d. somewhat less than others in the group
    e. much less than others in the group

25. To what extent were you independent of others during high school and college?

    a. much more than my classmates
    b. more than my classmates
    c. about the same as my classmates
    d. less than my classmates
    e. much less than my classmates

26. When you were growing up, about how many books were around the house?

    a. a fairly large library
    b. several bookcases full
    c. one bookcase full
    d. a shelf full
    e. very few or none

27. Before you went to college, how many magazines were subscribed to or bought regularly (per month) from news stands, by your parents?

    a. 0 b. 1 or 2 c. 3 or 4 d. 5 or 6 e. 7 or more

28. What would you guess was your family's average, annual net income during your last two years of high school? (What year did you graduate? 19____)

    a. $0-$9,999
    b. $10,000-$29,999
    c. $30,000-$49,999
    d. $50,000-$74,999
    e. $75,000 or more

29. How much education did your father have?

    a. did not complete high school
    b. high school degree
    c. some college, or business school training
    d. graduated from college
    e. graduate or professional degree

30. How much education did your mother have?

    a. did not complete high school
    b. high school degree
    c. some college, or business school training
    d. graduated from college
    e. graduate or professional degree

31. How would you classify your father's occupation?

    a. professional
    b. managerial or semi-professional
    c. retail business, sales, or rural owner
    d. skilled trades or clerical
    e. semi-skilled or unskilled labor

32. To approximately how many clubs, social and professional organizations did your mother belong while you were growing up?

    a. 0 b. 1 c. 2 d. 3 or 4 e. 5 or more

33. To approximately how many clubs, social and professional organizations did your father belong while you were growing up?

    a. 0 b. 1 c. 2 d. 3 or 4 e. 5 or more

34. With what social class do you associate your parents?

    a. upper class
    b. upper middle class
    c. middle class
    d. lower middle class
    e. lower class

35. When you were growing up, how much attention did your father give you?

a. a great deal
b. much
c. some, or don't remember father
d. little
e. very little

36. How do you feel about the achievements of your parents?

a. superior to those of most parents
b. superior to those of many parents
c. equal to those of most parents
d. almost as good as those of most parents
e. not as good as those of most parents

37. In high school, how close were you to your father?

a. extremely close
b. quite close
c. moderately close
d. not very close
e. not close at all (or deceased at that time)

38. How likely were your parents to give you affection, praise, and attention when you had done something well?

a. much more than most parents
b. more than most parents
c. about as much as most parents
d. somewhat less than most parents
e. less than most parents

39. Before you started college, was there someone other than your parents that strongly influenced you to pursue your current field of interest?

a. Yes, more than one person strongly influenced me.
b. Yes, there was one person who influenced me.
c. I do not remember any one person in particular.
d. No, there was no influential person who guided me.

40. How supportive were your high school friends regarding your choice of college majors and/or careers?

a. very supportive
b. somewhat supportive
c. indifferent
d. somewhat opposed to my choice
e. strongly opposed to my choice

41. How supportive were your college friends regarding your choice of college majors and/or careers?

a. very supportive
b. somewhat supportive
c. indifferent
d. somewhat opposed to my choice
e. strongly opposed to my choice

42. During high school, how much did you say what you felt?

a. very much b. much c. some d. little e. very little

FEELINGS ABOUT YOUR JOB

43. If you were to start your education all over again, would you choose a different field to enter into?

a.definitely b.probably c.possibly d.probably not e.definitely not

44. In general, how satisfied are you with your job?

a. very dissatisfied
b. dissatisfied
c. somewhat dissatisfied
d. indifferent
e. somewhat satisfied
f. satisfied
g. very satisfied

45. How do you feel about your life as a whole?

a. very dissatisfied
b. dissatisfied
c. somewhat dissatisfied
d. indifferent
e. somewhat satisfied
f. satisfied
g. very satisfied

46. Looking back at what you've gone through to get where you are today, would you say it was all worth it?

a. definitely
b. probably
c. uncertain
d. probably not
e. definitely not

47. How effective do you perceive yourself to be in dealing with the problems that confront you on the job?

a. very ineffective
b. somewhat ineffective
c. average
d. fairly effective
e. completely effective

48. How effective do you perceive yourself to be in dealing with the problems that confront you at home and in your social life?

a. very ineffective
b. somewhat ineffective
c. average
d. fairly effective
e. completely effective

49. Do you feel that you have sufficient time to be effective at home and in your job?

a. never b. seldom c. usually d. frequently e. always

50. If your schedule becomes tight, which area tends to suffer or be pushed aside?

a. household matters
b. family matters
c. work matters
d. research/individual career-related projects

51. When you have work-related problems/frustrations, how comfortable do you feel approaching your <u>colleagues</u> for support/advice?

a. very comfortable
b. somewhat comfortable
c. neutral
d. slightly uncomfortable
e. very uncomfortable

52. When you have work-related problems/frustrations, how comfortable do you feel approaching your <u>supervisor/department chair</u> for support/advice?

a. very comfortable
b. somewhat comfortable
c. neutral
d. slightly uncomfortable
e. very uncomfortable

53. Do you believe that you have a support group in the workplace, if needed?

a.Yes, definitely b.probably c.uncertain d.probably not e. no

54. Do you believe that you have a support group outside of the workplace, if needed?

a.Yes, definitely b.probably c.uncertain d.probably not e. no

<u>Women answer 55a, 56a, & 57a, men answer 55b, 56b, & 57b:</u>

55a. When you think of the "traditional" role of women as wives, mothers, and caregivers, how closely do you feel you fit that role?

a. very closely
b. somewhat closely
c. uncertain
d. somewhat different
e. very different

55b. When you think of the "traditional" role of men as hardworking "breadwinners", removed from domestic duties, how closely do you feel you fit that role?

a. very closely
b. somewhat closely
c. uncertain
d. somewhat different
e. very different

56a. How do you feel you compare with other women regarding your need for independence and power in decision-making?

a. much more than most women
b. slightly more than most women
c. same
d. slightly less than most women
e. much less than most women

56b. How do you feel you compare with other men regarding your need for independence and power in decision-making?

a. much more than most men
b. slightly more than most men
c. same
d. slightly less than most men
e. much less than most men

57a. Do you feel as if there is unjustified pressure placed on you to perform because you are a woman?

a. Yes, definitely
b. maybe
c. uncertain
d. Yes, but there is pressure on everyone
e. No

57b. Do you feel as if there is unjustified pressure placed on you to perform because you are a man?

a. Yes, definitely
b. maybe
c. uncertain
d. Yes, but there is pressure on everyone
e. No

58. Do you ever worry about not making it in this occupation?

a. never b. rarely c. sometimes d. often f. always

59. Have you ever felt that this might not be the right job for you?

a. never
b. rarely
c. infrequently
d. once or twice
e. sometimes
f. often
g. always

60. What level of informal feedback do you get from your supervisor or department chair regarding your job performance?

a.high b.above average c.sufficient d.below average e.too low

61. What level of informal feedback do you get from your colleagues/co-workers regarding your job performance?

a.high b.above average c.sufficient d.below average e.too low

62. Do you believe you have a person who acts as a mentor to you, someone who provides guidance and support beyond the normal supervisory role?

a.Yes, always b.Yes, usually c.occasionally d.very rarely e. no

63. In your opinion, how supportive is your spouse or life-partner of your career?

    a. extremely supportive
    b. somewhat supportive
    c. indifferent (or--not seriously involved with anyone right now)
    d. somewhat opposed to my career
    e. extremely opposed my career

64. In your opinion, how supportive are your friends of your career?

    a. extremely supportive
    b. somewhat supportive
    c. indifferent
    d. somewhat opposed to my career
    e. extremely opposed to my career

65. In your opinion, how supportive are/were your parents of your career?

    a. extremely supportive
    b. somewhat supportive
    c. indifferent
    d. somewhat opposed to my career
    e. extremely opposed to my career

66. Compared to other men and women your age and who are involved in the same occupation or type of work that you do, how successful do you feel you are?

    a. not successful at all
    b. slightly successful
    c. moderately successful
    d. frequently successful
    e. completely successful

67. How effective do you perceive yourself to be in the job in which you are presently involved?

    a. ineffective
    b. slightly effective
    c. moderately effective
    d. frequently effective
    e. completely effective

68. How successful would the people that you work with say that you are?

    a. not successful at all
    b. slightly successful
    c. moderately successful
    d. frequently successful
    e. completely successful

69. How well do you feel your career is progressing, compared to your male peers?

a. very poorly
b. somewhat worse
c. same
d. somewhat better
e. much better

70. How well do you feel your career is progressing, compared to your female peers?

a. very poorly
b. somewhat worse
c. same
d. somewhat better
e. much better

71. According to your most recent formal performance evaluation, how successful are you in your current occupation?

a. not successful at all
b. slightly successful
c. moderately successful
d. usually successful
e. completely successful

GENERAL HEALTH ISSUES

When you think about your life in general these days, how much of the time do you feel this way?

**Using the same answer sheet, please fill in the circle for each statement, based on this scale: (1=a, 2=b, 3=c, 4=d, 5=e)

1	2	3	4	5
Never	A little of the time	Some of the time	A good part of the time	Most of the time

72. I feel lively.
73. I feel nervous.
74. I feel sad.
75. I feel energetic.
76. I feel useful & needed.
77. I feel wornout.
78. I feel calm.
79. I feel restless.
80. I feel cheerful.
81. I get irritated and annoyed
82. I feel tense.
83. I feel frustrated.
84. I feel lonesome.
85. I feel depressed.
86. I get angry.
87. I feel alert.
88. I feel anxious.
89. I feel blue.
90. I feel carefree.
91. I get aggravated.
92. I feel unhappy.
93. I feel tired for no reason.
94. I feel discouraged.
95. I feel vigorous.
96. I feel good.

Read each of the following statements and indicate the extent to which it applies to you, using the same scale as above.

1	2	3	4	5
Never	A little of the time	Some of the time	A good part of the time	Most of the time

97. I do not have very good health.
98. I feel restless and uneasy more often than I probably should.
99. I am often bothered by acid indigestion or heartburn.
100. I wake up with stiffness or aching in joints or muscles.
101. My job tends to directly affect my health.
102. I work under a great deal of tension.
103. I have had trouble getting to sleep or staying asleep.
104. I have felt fidgety or nervous as a result of my job.
105. I have an ulcer condition.
106. I have fairly frequent headaches.
107. If I had a different job, my health would probably improve.
108. I seem to tire quickly.
109. Job worries sometimes get me down physically.
110. I breathe a sigh of relief when I miss a day of work.
111. Problems associated with my job have kept me awake at night.
112. I have worried, after making a decision, whether I did the right thing.
113. I may now have an ulcer, but I am not sure of it.
114. I have felt nervous before attending meetings in my department or college.
115. I often "take my job home with me" in the sense that I think about it when doing other things.
116. I often wonder whether it's all worth it.

Please continue by completing the brief inventory on the next page.
Thank you again for your participation.

APPENDIX 3:

BEM SEX ROLE INVENTORY

(From Bem, 1981)

Copies of the Bem Sex Role Inventory may be obtained from Consulting Psychologists Press, Palo Alto, California

APPENDIX 4:

SURVEY COVER LETTER

DEPARTMENT OF PSYCHOLOGY

IOWA STATE UNIVERSITY

Anne C. Berland
Dept. of Psychology, I.S.U.
Ames, Iowa 50011-3180
Phone (515) 294-8126

Dear Professional:

I am a graduate student in Psychology at Iowa State University. My dissertation research involves studying how people in professional positions adjust to their work and how well they succeed in those careers. To complete my research project, I'm asking for your help. I am asking women and men in a variety of fields to complete a questionnaire which will help to identify those factors that lead to adjustment and success in a number of occupations. The purpose of my research is to gather information about your lives to determine the factors that influence your success in your job. By completing the questionnaire I have sent you, you will be helping me to answer a very important question: More and more people are entering professional fields--How will these professionals fare?

Completion of the questionnaire will take only about forty minutes, but you'll be doing me a great service and you may find many of the topics interesting. Of course, your answers will be completely confidential and my report will contain no names or identifying information. Just take a few minutes out of your busy day to answer the questions before you and then mail the questionnaire back to me using the envelope I've provided in the packet. If you would like to speak with me regarding my research or if you have any questions or concerns regarding the questionnaire, please do not hesitate to call me at the number listed above.

Thank you for your participation in my research project. I appreciate your involvement in addressing a very important issue.

Sincerely,

Anne C. Berland

Paul M. Muchinsky, Ph.D.
Major Professor

APPENDIX 5:

ITEMS COMPRISING CASQ SCALES

1. Socioeconomic Status: 26-34, 36
2. Past Independence: 14,15,17,18,21,24,25,42
3. Past Social Support: 13,16,19,20,22,35,37,38
4. Current Social Support: 51-54,60-62,64
5. Current Independence: 56
6. Spouse Support: 63
7. Past Mentor: 39
8. Sex Role Orientation: 55
9. Adjustment: 43-46,49,57-59,72-116
10. Success: 47,48,66-71

Items dropped from analyses: 23 (independence allowed by parents)
40,41 (past support of friends)
65 (current parental support)

APPENDIX 6:

FREQUENCIES OF DEMOGRAPHIC VARIABLES

Frequencies of demographic variables

Demographic Item	Total (n=134)	Traditional (n=58)	Nontraditional (n=76)	Diff.
1. Tenure:				
mean/SD	3.65/1.31	4.26/1.16	3.18/1.23	0.001
< 1 year	5	2	3	
1-3 years	32	5	27	
4-5 years	20	6	14	
6-10 years	25	8	17	
10+ years	52	37	15	
2. Change Jobs:				
mean/SD	3.73/1.15	3.93/1.31	3.58/0.98	--
definitely	6	5	1	
probably	15	4	11	
possibly	29	9	20	
probably not	43	12	31	
definitely not	41	28	13	
3. Change Careers:				
mean/SD	4.33/0.95	4.38/1.01	4.29/0.91	--
definitely	2	2	0	
probably	7	1	6	
possibly	12	7	5	
probably not	37	11	26	
definitely not	76	37	39	
4. Age Cohort:				
mean/SD	4.37/1.75	5.36/1.64	3.62/1.42	0.001
21-28 years	1	0	1	
29-34 years	23	4	19	
35-39 years	24	7	17	
40-44 years	27	5	22	
45-49 years	19	10	9	
50-54 years	16	12	4	
55+ years	24	20	4	
5. Marital Status:				
mean/SD	2.67/0.95	2.60/1.12	2.72/0.84	--
single	27	15	12	
life-partner	8	4	4	
married	84	31	53	
divorced	12	5	7	
widowed	3	3	0	

6. Children at Home:				
mean/SD	1.60/0.89	1.24/0.54	1.87/1.00	0.001
0	87	47	40	
1	17	8	9	
2	27	3	24	
3	3	0	3	
4 or more	0	0	0	
7. Planning __ More Children:				
mean/SD	1.36/0.79	1.17/0.60	1.50/0.89	0.017
0	107	53	54	
1	10	1	9	
2	14	3	11	
3	2	1	1	
4 or more	1	0	1	
8. Length of Maternity Leave:				
mean/SD	1.26/0.60	1.12/0.42	1.37/0.69	0.017
no more kids	108	53	55	
Yes-ASAP	19	3	16	
Yes-after time off	5	2	3	
Yes-after years off	2	0	2	
No more work	0	0	0	
9. Number of Siblings:				
mean/SD	3.06/1.31	3.05/1.37	3.07/1.28	--
0	16	8	8	
1	38	16	22	
2	27	11	16	
3	28	11	17	
4 or more	25	12	13	
10. Birth Order:				
mean/SD	2.06/1.02	2.03/1.04	2.08/1.00	--
oldest	50	23	27	
middle	41	17	24	
youngest	28	11	17	
only child	15	7	8	
11. Level of Education:				
mean/SD	3.75/0.94	3.78/0.68	3.72/1.10	--
BA/BS	7	1	6	
Some Graduate	4	0	4	
MA, MBA, or MS	26	15	11	
Ph.D., DBA, MD	76	37	39	
Post-Doctoral	21	5	16	

12.Became Interested In Field:				
mean/SD	4.67/1.67	4.44/1.79	4.84/1.56	--
always	13	7	6	
early grade school	9	6	3	
about age 10	6	1	5	
junior high	12	1	5	
high school	35	14	21	
college	59	23	36	
50.What Part of Life is Pushed Aside if Busy:				
mean/SD	1.59/1.13	1.60/1.15	1.58/1.11	--
household	101	44	57	
family matters	9	3	6	
work matters	2	1	1	
research and individual career-related projects	22	10	12	

ACKNOWLEDGEMENTS

I would like to express my appreciation to the many individuals who contributed to my graduate studies and to the writing of this dissertation. First, I would like to thank the members of my doctoral committee, Drs. Brown, Johnson, Phye, and Roberts, whose constructive comments and suggestions were greatly appreciated.

I would especially like to express my appreciation and gratitude to my major professor, Dr. Paul Muchinsky. Not only has Paul provided essential guidance throughout the completion of this research, he has provided professional advice and moral support throughout my years at Iowa State University. Paul has acted as teacher, mentor, friend, and counselor to me during my graduate years. His insight and candor has provided me with much more knowledge, both personally and professionally, than any textbook on the market. He has instilled in me a sense of confidence in my abilities that was not present at the start of my graduate career. He has shown me how rewarding a career in academia can be if one becomes involved and gives fully to one's students, as he has done. Therefore, I am taking this opportunity to extend my sincerest thanks to Dr. Paul Muchinsky. He will continue to be a friend and colleague.

Finally, I would like to extend heartfelt love and thanks to my family for their support throughout my years in graduate

school. First, I would like to thank my parents who have been both morally and financially supportive throughout my education. They are responsible for teaching me to appreciate the value of education and to strive for the things that I desire. I would also like to thank my husband, Jeffrey, for his unstaggering support. He has seen me through all of the "bleak days" of graduate school. He has lightened my burden considerably and has made it all bearable. Without Jeff's undying support and love, this dissertation would have taken longer to complete and would have been much less enjoyable.